

**Contents****Index****Introduction to the conference****Committee members****Keynote presentations**

	<b>Wednesday 18/11/09</b>	
Keynote 1	Self regulation concerning social interaction: Theoretical and empirical foundations	3
Keynote 2	A networked learning perspective on teacher professional development	9
	<b>Thursday 19/11/09</b>	
Keynote 3	Learning in teams and networks in education and professional practice: Results of Research and Theories	13
	<b>Friday 20/11/09</b>	
Keynote 4	Regional landscapes of education and learning - A concept for educational practice	14

**Paper Presentations**

	<b>Wednesday 18/11/09</b>	
1	Enhancing reciprocal learning with task cards	15
2	"I feel a responsibility... to be doing the job well." Personal and organisational capabilities for using knowledge in social work practice	17
3	A generic capacity model as a scaffold for guiding, study career coaching and assessing directed towards students' growth on generic capacities	19
4	Can the syllabus actually impact students' perceptions of a course regarding their personal needs and motivation?	21
5	Self-management via clear expectations: using "the Principles of Learning" to facilitate student & teacher competencies	23
6	Foreign language teachers' overexposure to change and ICT integration into professional practice: a theoretical analysis	24
7	Networked learning in education; the development of a scan to determine feasibility of networked learning in educational organisations	26
8	Is learning by doing superior to learning by viewing? More evidence of similarities than of differences	28
9	Knowledge confrontations for deep understanding : findings from 7 years' experience in designs	29
10	Views upon knowledge and its implication for studying learning in organizational networks	30
11	Teachers providing each other feedback within reciprocal peer coaching:	

	what does the literature say, and what does the practice say?	32
12	How to foster the development of empathy and sympathy	34
13	Choosing their own lecture: power relations in the lecture room	36
14	The interface between research project and students' learning	37
15	In-service teacher professional identities in online contexts	38
16	Assessment of interpersonal skills in pre-registration nursing students: realistic evaluation of one tool used in one UK university	40
	<b>Thursday 19/11/09</b>	
17	Designing development in diversified higher educational contexts: students' accounts of constructing expertise in multilingual academe	42
18	The role of practitioner research and social competence in sustaining Professional Development Schools: a study of simultaneous renewal across three PDS networks in the United States	44
19	Measuring social competence in Dutch primary schools	46
20	I see you and you see me: effects of meeting scientists on teachers' science education	48
21	Improving students' capability of regulating their learning process	50
22	The implementation of a procedure for collective learning in a primary school in the Netherlands	51
23	Study success and differential perception of the undergraduate Pharmacy teaching/learning environment by Western and non-Western ethnic students	53
24	Knowing myself as other than my students - Reflections on a narrative dialogue with life stories of students	55
25	Experiences of pioneers in the landscape of educational learning networks ; Challenges facilitators encounter when they want to start moderating networked learning	57
26	The differential effects of task complexity on domain-specific and peer assessment skills	58
27	Concept maps in question-driven learning: a tool to support the process and value its outcomes	60
28	Self-assessment of (multi-faceted) competence increase after management training: extended application area of the BEvaKomp	62
	<b>Friday 20/11/09</b>	
29	Enhancing emotional self-efficacy as the missing piece in SEL implementation	64
30	Student communities of practice and teacher participation	65
31	Factors affecting students' self-efficacy in education	66

32	Fostering reading competence in vocational education with an adapted concept of reciprocal teaching	67
33	From facilitation to self-governing learning networks: what are the factors that influence the continuation of a learning network?	68
34	A case study on integrating soundbeam technology and music activities to enhance a special needs child's development of motor skills and attention span	69
35	Protective factors in children and adolescents bullying or being bullied: do they buffer risk factors? An approach on the basis of the large German wide representative KiGGS sample	70
36	A questionnaire to determine the 'teacher-' and the 'student centred-' teacher in pre-vocational education	72
37	Knowledge building in a Master Learning and Innovating for teachers in vocational Education	74
38	A question of balance in practice enterprise	76
39	The development of a reflective capacity: moving towards 'self-authorship'?	77
40	Developing the scales on evaluation beliefs of student teachers	79
41	Teachers' identity, role, knowledge and professional practice : an inquiry to the Portuguese case	80
42	Adapt collaborative learning to a flexible and interactive (computer bases) learning environment through the use of ' Belbin roles'	82
43	Professionalization of teachers and trainers in adult education by using video-based cases	83
44	Teachers' professional development culture and the influence of the school system. A German Swedish comparison	85
45	Bridging the gap: education, popular culture, and technology	86

## Workshops

<b>Wednesday 18/11/08</b>		
1	Using participative theatre as a dynamic form of social action learning that promotes equality and diversity	87
2	Value-based education in schools	88
3	Designing a School Information Leaflet Gathering and Analyzing Individual Educational and pedagogical Goals	89
<b>Thursday 19/11/08</b>		
4	Getting Started with Knowledge Building Creation: workshop for beginners	90

5	Tools to facilitate networked learning	91
6	Initiating an International Large Scale Assessment for Social Competencies	92
7	Zones of teacher thinking in relation to action: A tool for analyzing one's knowledge about teaching and learning	93

#### **Interactive Posters**

1	Purpose as biological necessity - Human consciousness from an evolutionary Perspective	94
2	Teacher communities for work and learning: how to measure social competences and community building?	96
3	Experimentation on a differentiated and explicit writing approach	98
4	Increasing a better study career choice by using a computer assisted self-Assessment	100
5	Adaptive instruction to foster students' information problem solving skills: learning to organize digital information	102
6	Assessment of medical students competences in Physician-Patient Communication	104
7	An integrative framework of study career counselling for students of senior general secondary education	106
8	Ethnic minority students on the road for a successful transition to higher professional education	108
9	Standardized patients as a tool for improving communication skills and social competencies of medical students	110

#### **Symposia**

1	Promoting cooperative workplace learning in heterogeneous groups. The THRILL experience.	112
2	Out of school, out of sight? Building strong relationships between the world and the classroom	116

## **Index**

Blonk Anita	89
Brohm Michaela	3, 88, 91, 92
Bundy Carol Anne	94
Caffesse Luciana	24
Castelijns Jos	51
Cornelissen Frank	30
de Jong Frank	19, 72, 74, 90, 113
de Laat Maarten	9, 26, 57, 91
de Vries Bregje	48, 116
De Vries Hans	100
Digel Sabine	83
Dochy Filip	13
Druener Susanne	104, 110
Dubé France	98
Gidron Ariela	55
Goes-Daniels Miriam	68
Gonçalves Teresa	80
Gordon Jean	16
Grion Valentina	38
Hanraets Irene	57
He Qiaoyan	79
Herz Otto	14
Holle Jörg	88
Hooijer Janneke	65
Iserbyt Peter	15
Joosten Froukje	46
Kasler Jonathan	64
Kienhuis Marian	106
Koster Andries	53
Kugler Gabriela	67
Kumrai Rajni	87
Lauwers Marleen	82
Leduc Laurent	21

Lee Liza	69
Lockhorst Ditte	96
Lombard François	29
Lucas Ursula	77
McAlpine Lynn	93
Meier Kate	40
Mundy Darren	36
Pfeiffer Janina	104
Picker Susan	23
Ringeisen Tobias	62
Schlack Robert	70
Stokhof Harry	60
Suni Markku	76
Szafranski Tamara	86
Terlouw Cees	100, 106, 108, 112
Thurlings Marieke	32
Väänänen Ilkka	37
van Beek Jantine	72
van Benthum Niek	19
van der Meijden Annemiek	50
van der Ploeg Piet	34
van Dinther Mart	66
van Schuppen Nine	108
van Zundert Marjo	58
von Stülpnagel Rul	28
Walhout Jaap	102
Wermke Wieland	85
Yendol-Hoppey Diane	44
Ziegler Gudrun	42

## **Introduction to the conference**

The EAPRIL 2009 conference succeeds the 3rd Practice-Based and Practitioner Research conference. Due to the successes of the PBPR conferences, the initiative was taken to found a network organisation for anyone who wishes to contribute to the development of education through practice-based and applied research. The conference, being the first activity of the EAPRIL association, welcomes practitioner researchers, educational developers, professional and staff developers, educational technologists, instructional designers, educational policy makers, people involved in organisational change in educational institutions, teachers, trainers, academic researchers in the field of applied education, and so on. The involvement of different stakeholders on an international scale is of utmost importance for the success of the conference. Members of EAPRIL, and persons interested in the improvement of learning in education and professional practice are welcome to present research results at this conference, or to participate without contributing. This year's theme is **'Improving Social Competences and Network Learning in Education and Professional Practice'**.

Modern society is facing many challenges, putting schools under pressure to create effective learning environments where students can acquire social as well as academic skills that will allow them to succeed in school and beyond. Institutes are forced to implement rapid changes and innovations, keeping into account the increasingly diverse population. Many practitioners and researchers are developing and applying usable knowledge to improve the quality of educational practice and policy. This conference offers a platform to organize and disseminate information and knowledge that illuminates our long-range understanding of learning processes.

The central task for educational processes is to convey factual competences as well as personality-development. The core of **personality-development** is the development of social competences, for example empathy, problem-solving ability, ability to cooperate and communicate. Those abilities insure the coping of social and personal needs as acting in a context of globalization and modernization, fulfillment of the individual, psychically and physically unbiased, socially and job-market-related integrated way of life.

For this conference we have chosen for a broad definition of **"social competence"**, all forms of individual self regulation can be interpreted as the core of social development. So social competence can be interpreted as a sub construct of the theoretical construct of "competence" and includes all forms of "personal competencies". According to DuBois/Felner (1996/2006), it is created by the linked elements "cognitive skills and abilities", "behavioral skills", "emotional competencies" and "motivational skills and expectancy sets".

The underlying question of this conference is, how to promote social competencies, for instance setting and achieving goals, self-management, models of communication, win-win-strategies, forms of cooperation, team-building- and team-development-processes, etc. Despite a clear approval of educational policy towards conveying social competencies in schools and at universities, research in this area is neglected due to predominance of a debate that favors the achievements in certain subjects (factual competencies). With this conference, we will strengthen the research and teaching/learning practice in this fascinating area.

## **The conference committee**

**Members of the Executive Board:**

Filip Dochy from Belgium,  
Frank de Jong from the Netherlands,  
Lynn Mcalpine from the UK,  
Sari Lyndblom-Ylännä from Finland,  
Rob Martens from the Netherlands,  
Goele Nickmans from Belgium,  
Kari Smith from Norway.

**Local Organising Committee:**

Michaela Brohm, Trier University, Germany  
Jörg Holle, Trier University, Germany  
Sabine Schmidthermes, Trier University, Germany.

**Members of the International Review Committee:**

Michaela Brohm from Germany,  
Filip Dochy from Belgium,  
Frank de Jong from The Netherlands,  
Rob Martens from The Netherlands,  
Lynn Mcalpine from the UK,  
Sabine Schmidthermes from Germany,  
Goele Nickmans from Belgium,  
Kari Smith from Norway,  
Jörg Holle from Germany,  
Franzis Peckel from Germany,  
Wolfgang Lutz from Germany.



## Self regulation concerning social interaction: Theoretical and empirical foundations

The central task for educational institutions is to convey factual competences as well as personality development. The core of personality development is the development of social self regulation, defined in a broad way as the ability to control one's own behaviour in social situations. The social self control ensures the coping with social and personal needs. The outcome of social self regulation is socially-competent behaviour. Social self regulation preconditions the existence of social competences. Due to these foundational basic theoretical remarks, I will focus, at first, on the development of social competences in educational processes.

The lecture will provide an overall view on the issue of this conference: (1) the theoretical foundations and models of the concepts of social competences, (2) the need of conveying social competences in institutional frameworks. Moreover, (3) aspects concerning social interaction in regard to educational practice will be discussed.

### I. Theoretical Foundations and Models of the Concepts of Social Competences

Social competence is a sub-construct of the theoretical construct of "competence". Provided this, we should, firstly, ask about the structure of competence itself. Like in any other theoretical approach, there is no set definition of general competence whatsoever. Therefore, we tried an empirical approach by meta-analytically reducing general as well as widespread models of competence (White 1959, Chomsky 1965, Roth 1966/1971, Weinberg 2000, Weinert 2001, EU 2006 et. al.) to their core and aligned them with each other.

We concluded that the concept of competence is a context- and subject-bound approach (Erpenbeck/von Rosenstiel 2003, p. Xf.) which comprehends two elements: the structure at the surface and the structure within the depth of a person:

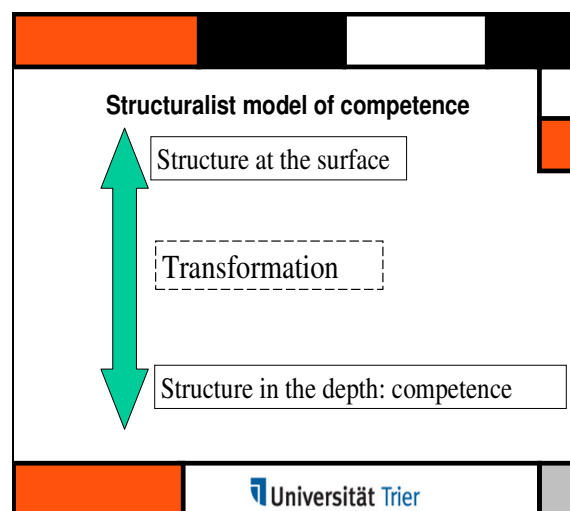


Fig. 1: Structuralist model of competences (Brohm 2006)

In the structuralist model of competences, we differentiated between the structure at the surface of a person and the structure within the depth of a person. The last one is the competence itself. Between the structure at the surface and the competence in the depth of the person, transformational processes are assumed, which are located within the person.

According to this, we integrated conditions and frameworks according to developing social competences. Aligning this with the models specifically related to social competence (Petermann/Petermann 1992, Kanning 2002, Hinsch/Pfingsten 2002, DeSeCo 2005, DiPerna 2006, DuBois/Felner 1996/2003 et.al.) in general we assumed that (1) social competences are coined and applied in social communities and are (2) situation-bound balancing acts of enforcement and socially accepted behaviour (social accommodation). Finally, (3) we resulted from our alignment a "structuralist model for social competence", which determines the theoretical framework for analytical and interventional research and practice:

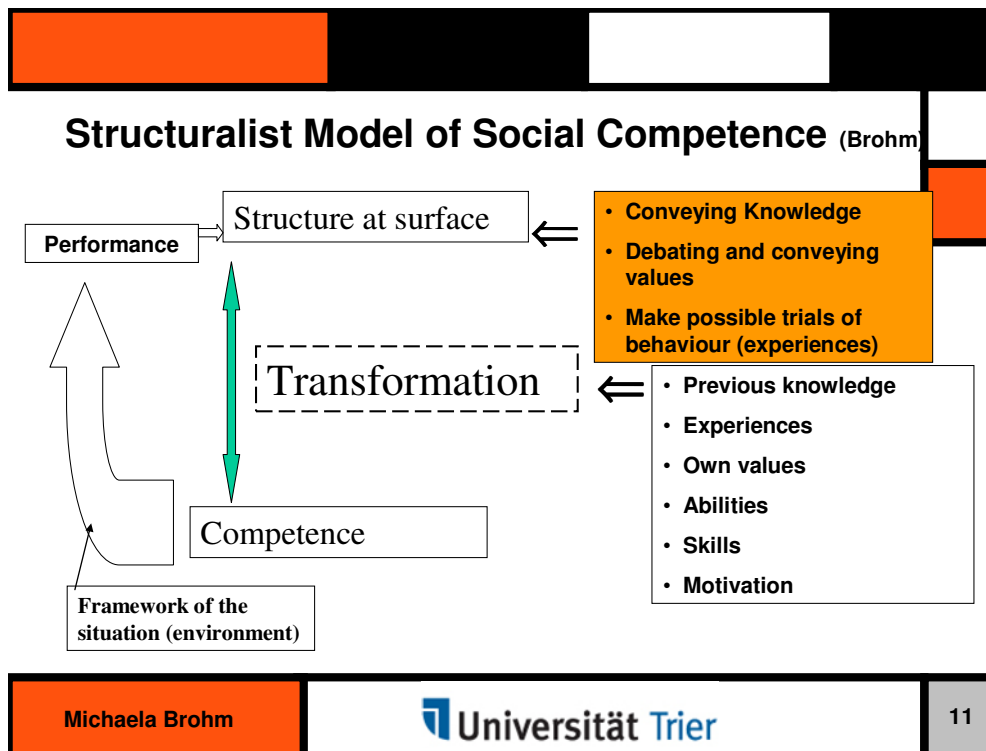


Fig 2: Structuralist model of social competences (Brohm 2009)

The structuralist model of social competences shows a possible structuring: Knowledge offered from outside becomes important foreknowledge available for further transformation processes if it is internalised by the individual. Experienced values (observed in examples) are thus appropriated by acceptance or rejection; trials of behaviour lead to a moulding of own experiences, knowledge and abilities. This transformation process is supported by motivation. The sum of these factors forms the competence level, which can be reflected in the performance of the individual. The prevailing conditions in a specific situation (determined e.g. by the level of currently felt esteem) influence the actual behaviour (i.e. the respective performance) of a competent person. Using the competence model, it can be deduced that conveying and development of competence *cannot* be achieved from outside (i.e. e.g. by teachers). Pedagogical interventions have *no* direct access to intra-personal transformation processes. Teachers who want to foster the competences of their students, can do this indirectly by:

- living the respective values themselves (and talking about them),
- offering a space for trials of behaviour (and practising new situations) and by
- the teaching of knowledge.

Starting from this basis, the teacher has reason to hope that the student will develop competences.

If we try to define the elements concerning the socially-related skills, behaviour, values e.g., we find solid hints in the analytical approach of the "Quadripartite Model of Social Competence" of DuBois/Felner (1996/2003), which integrates the linked elements "cognitive skills and abilities", "behavioral skills", "emotional competencies" and "motivational skills and expectancy sets" (ibid. p. 126). More concrete is the approach of Uwe Peter Kanning (2006), who analysed over 100 definitions

and models of social competence and analysed their basic elements. He concluded that social competences include the following elements:

### **1. Social Orientation**

Pro-social behaviour  
Supporting others  
Active listening  
Pluralism of values  
Acceptance of different perspectives  
Respect for the interests of others  
Claiming support

### **2. Offensiveness**

Ability for enforcement  
Willingness to stand conflicts  
Representing own interests  
Extraversion  
Devaluation of others

### **3. Self-monitoring**

Decisiveness  
Self-control  
Emotional stability  
Flexibility of action  
Internality

### **4. Reflexivity**

Indirect self-attentiveness  
Apperception of persons  
Self-representation  
Direct self-attentiveness  
Perform concealed influence

His description is only empirical and does not evaluate. It is the task of educational processes to define the aims of the educational process ("Erziehung") and to value the dimensions.

## **II. Need of Conveying Social Competences in Institutional Frameworks**

The core of personality development is the development of social competences (empathy, problem-solving ability, ability to cooperate etc.) since it ensures the coping with social and personal needs (acting in a context of globalisation and modernisation, fulfilment of the individual, psychically and physically unbiased, socially and job-market-related integrated way of life).

There are various arguments for conveying social competences in educational contexts:

1. Conveying social competences at schools *answers the demands of international and national laws*: The education-centred laws of the Human Rights Conventions of the United Nations and the European Union, the national and regional rights of European regions (analysed here as an example the German Grundgesetz and the Landesgesetze):

1. Acceptance and respect of *human rights* with emphasis on: Human dignity, tolerance of other nations, races and religions, ban of discrimination on social, political grounds, or concerning sexual orientation, equal rights for genders
2. Awareness of *democracy and democratic behaviour*
3. *Peace education*
4. *Sustainability education*
5. Development of *personality* and skills

6. *Social coherence and cooperation*, willingness to behave in a social way
7. *Employability* (incl. achievement and cooperative motivation, life-long learning skills)
8. *Factual knowledge and skills*

These goals are *hardly attainable without social competence* (pro-social behaviour, willingness to cooperate and to communicate, ability to handle conflicts etc.)

II. In times of globalization and social transformation, social competence shows to be:

- From the political perspective (Lissboa-strategy), the development of social competences is a fundamental educational aim to raise human capital and by that – according to the European Council – to promote equality of chances.
- According to the pedagogic approaches of global learning and sustainability education, social competence is a prime education goal to foster *sustainability and to reduce social unbalances as well as to have a peacekeeping influence* in a global community (cf. Hallitzky/Mohrs 2005).
- From a economic perspective, it is an important precondition in the context of qualification for vocational training (and therefore for a promotion of chance equality in the job market) (cf. Klein 2005);
- In the context of resilience research, it can be understood to be a substantial *element of psycho-social resistance* (cf. Holtmann/Schmidt 2004; Holtz 2006).
- In its inverted form – as dissociality – it promotes behavioural disorders, psycho-social illnesses and delinquency (cf. Ihle/Esser 2002; Lösel/Beelmann et al. 2006; Hölling/Erhart et al. 2007).
- It seems to show a reciprocal *positive correlation to learning success* (cf. DiPerna/Elliott 2002; DiPerna 2006).

Empirical studies show that a lack of social competences leads to severe social and economic disadvantages (cf. Brohm 2009).

According to constant findings of research, there are three (or four) risk groups of people dreaded by manifest dissocial behaviour (i.e. lacking pro-social behaviour): (1) Boys, (2) children and youths with an emigrational background and (3) children and youths with a low social and economic status. These risk factors overlap frequently. For these groups, the probability of being dissocial, becoming psychosocially sick or delinquent is nearly twice as high as for girls, German children and adolescents and children from families with a high socio-economic status.

In current research, an additional risk group is being mentioned: (4) children and youths from families with a high social and economic status that withdraw from social responsibility (affluent neglect, “Entsolidarisierung”).

Strictly speaking, the request of a teaching of social competences is, therefore, also political in terms of education and social policy insofar as it allows children and youths not coming from the educated middle-class or economically well-off families (or coming from such a family but showing dissocial behaviour) to develop the above-mentioned potentials (employability, psycho-social robustness, psycho-social health, social integration). Additionally, the promotion of social competences can help all children and youths to reach a higher life quality and a higher level of social participation (cf. above).

### III. Promoting Social Competences

Social competences are based on knowledge and experiences. Knowledge about social competence has not yet been taught explicitly in an academic framework (setting and achieving goals, self-management, models of communication, win-win-strategies, forms of cooperation, team-building- and team-development-processes etc.). In some empirical interventional studies we were able to show that it is possible to create socially-related knowledge and change it into measurable social-competence-related effects (cf. Brohm 2009). If integrated permanently into educational processes, there is reasonable hope that sustainable increase of social competence, and therefore of social self regulation, is possible with knowledge-, value- and experience-based interventions. From the structuralist model of social competence and our data we derived the following possible interventions:

- I. Implementation of a binding, systematic curriculum of social competence based on minimum standards and foci that respect the different stages of development: within the structuralist model of competence, the development of social competences is closely connected to values, experiences and knowledge. Therefore, *content-standards* (content related to social competence and values, e.g. target planning, team-building, stages of teamwork, rules of communication, firm knowledge about human rights and freedom rights etc.) and *opportunity-to-learn-standards* (describing the possibilities for experiences that have to be offered to every student during school, e.g. collective and also independent formulation of broad social projects, collective handling of team tasks, sponsorship of "third-world"-projects per class, three voluntary "social weeks" in welfare institutions).
- II. A learning environment for sustainable value- and experience-development: arranging an independent subject that is implemented in the class schedule or teaching the curriculum *within regular, scheduled trainings* (e.g. one day per month) over a *long term* (e.g. over multiple school terms).
- III. *Consensus about values* in every school: By reason of assumption of plausibility we can expect that the value-oriented part of social competence cannot be intermediated by the interventions listed under point II only. More likely, it needs a consensus about values in every school that is represented in the educational practice as well as in the existing school culture. This consensus is not negotiable (like e.g. suggested by the school's programme), since it is defined in basic national and international law: It is the humanitarian, pro-social basis of enlightened societies: human rights, children's rights, democracy, respect for the dignity of man etc. It is about a "menschenrechtlich fundierte Durchdringung der ganzen Schule und des gesamten pädagogischen Handelns" (Edelstein 2005, p. 9).
- IV. *Implementation into the training of teachers*: Teachers should (1) know and test the knowledge-based elements of social competence (terms of communication, leading discussions of criticism and praise that are not harmful to others, initiating team-building processes professionally, team-work obstacles and team-supporting factors etc.), as well as (2) the basic values to intermediate to students. Teachers should also be bound to these values insistently.

The intermediation of social competence can be understood as a primary educational task to the educational duty of schools. As a visionary thought, the value-based school culture that is aligned with the social development of students could change every academic level: from the privilege of participating, gender-just, migrant-just, socio-economically just and solidary forms of teaching to an esteemed working of students in groups and committees. Thus, it is an essential help in humanizing schools.

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## **A networked learning perspective on teacher professional development**

Schools, when thinking of teacher professional development, often rely on refreshment courses given by experts, in-service training, or personalised learning trajectories such as coaching. These formal training opportunities provided for teachers represent just the tip of the iceberg when imagining all learning that takes place triggered by the challenges teachers face in their daily practice. These more spontaneous and informal ways of learning are largely overlooked on organisations and remain therefore implicit and are in most cases individual learning experiences. Yet at the same time there is a large body of literature that convincingly shows that these forms of spontaneous work related learning are important drivers for ongoing professional development (Eraut, 2000, Marsick, 2001; Nonaka and Takeuchi, 1995; Billet, 2001). Within this work there is a tendency to move away from an emphasis on training towards a focus on learning; seeing working and learning as one and the same. In this light professional development is a continuing process of acting, reflecting, and changing day to day practices. This perspective gives rise to a more bottom-up – self governing - understanding of learning where workers with their colleagues interact about their work experiences through sharing their experiences, knowledge and contacts providing access to new or alternative resources.

Innovative teacher professional development should involve therefore opportunities for teachers to share their expertise, learn from peers, and collaborate on real-world projects (Vrasidas and Glass, 2004). This approach to learning embraces the participation metaphor (Lave and Wenger, 1991 & Sfard, 1998) where learning is seen as situated, embedded and maintained in the daily culture of (shared) practices and professional standards. These practices not only concern the practice of your own classroom or school. Participation also means involving yourself with a larger perhaps even a global landscape of practices (Wenger, 1998). Learning in this context is distributed (Salomon, 1993) over a network of people (Bereiter, 1991) active as teachers and sharing work related issues. This process of participation is best served through the ability of people to create and continually extend or maintain a meaningful social/professional network. People use their networks as a social infrastructure to gain access to what it is they are looking for whether it is products/materials, knowledge and new colleagues.

Networked learning is an emerging perspective that tries to understand this process by asking the question how people develop and maintain a 'web' of social relations used for their own and reciprocal learning and professional development. What is the quality of these relations and what determines learning within this relationship? A well known example of a closely knit social structure is the concept of communities of practice (Wenger, 1998). In these communities people have tight long lasting social relationships related to their practice and domain. At the same time empirical research has shown that the emergence and cultivation of communities is a difficult process to say the least. Another critique that is often heard is that successful communities tend to develop a strong active core with an inward focus which is all right for preservation and deepening of knowledge but less productive when it comes to innovation and stimulating participation or legitimate peripheral participation. Communities place an emphasis on strong relationships implying a certain closeness and unity in its purpose (Jones, Ferreday and Hodgson, 2008). A networked learning perspective attempts to challenge this by focusing on the diversity of social relationships people develop. In the area of professional development for teachers for example; what matters is the relative number of contacts (and its quality) one has to share work related experiences with. This can mean talking with one or more colleagues in the hallway or in the coffee corner; or sending an email, skype or phone with a few peers around the world, or sharing your experience with one or more communities you are a member of. Networked learning puts the emphasis on the learner and tries to maximise the network in which this person navigates in support of its learning, whether this learning is personally driven, collaborative or collective.

Networked learning is a term introduced around mid 1990's to refer to ways new communication

technologies can influence teaching and learning (Harasim, Hiltz, Teles & Turoff, 1995; Goodyear, Banks, Hodgson and McConnell, 2004; Siemens, 2004; De Laat, 2006). By networked learning we mean the use of ICT to promote collaborative or cooperative connections between learners, their tutors and learning resources (Steeple and Jones 2002) and to enhance the efficacy of learning among its members. Early networked learning research mostly focused on exploring the affordances of technology to support learning (Goodyear et al. 2004; Conole and Dyke 2004). Interest now has turned to the social aspects of networked learning, with a focus on building and cultivating social networks and seeing technology as a part of this rather than as an end in itself (Haythornthwaite, 2008; De Laat 2008). Its relation to the network society (Castells 1996), with its ever-growing use of information and communication technologies (ICT) and social networking on the Internet, makes it a relevant framework for professional development and lifelong learning. Research shows that having an extended network is crucial for personal and professional development (Granovetter 1973; Levin and Cross 2004). Contacts cultivated in these networks can range from very loosely coupled acquaintances to long-lasting friendships and community memberships. Both the weak and strong relationships (often called ties) in these networks are important for learning. Granovetter (1973) showed that the importance of weak ties is to gain access (often called bridging) to new knowledge, while strong ties with peers, who are close to you, are needed to deepen and embed knowledge closely related to day-to-day shared practice. Levin and Cross (2004) studied the nature of these weak ties, looking at knowledge sharing in companies. They found that for informal learning and professional development people rely for new knowledge on weak ties with competent people they can trust. Other studies show that having or building a network will be beneficial to lifelong learning and professional development. In the field of teacher development for example, some key studies show the added value teacher networks have for the implementation of innovations, teacher development, school leadership, and improved teaching practices (Lieberman and Wood 2002; Dresner and Worley 2006; Earl and Katz 2007; Katz and Hands 2007).

Networks and communication nowadays are increasingly mediated through technology. Thus, social networking supported by technology is an increasingly important field of study for understanding and improving the way people learn and create opportunities to develop their potential. From the perspective of networked learning it is important to explore how people fit technology in their day-to-day learning. Dalsgaard (2006) argues that people are relying on social software tools to manage their collaborative learning. Social software like social bookmarking, weblogs and social networking are examples of 'networked tools that support and encourage individuals to learn together while retaining individual control over time, space, presence, activity, identity and relationship.' (Anderson, 2005).

At the Ruud de Moor Centre for teacher professional development, at the Open University of The Netherlands, we run a research programme looking into ways in which networked learning can provide alternative opportunities for stimulating and implementing professional development. In this presentation I will illustrate some of our current projects on teacher professional development and some of the tools we are currently testing / developing to support this. Tools we are currently experimenting with are:

**1 Network Scan** - a questionnaire to map out the feasibility of networked learning in or between school organisations (i.e. the space for informal learning in the organisation), learning among colleagues and learning in networks. The outcome provides a way to make explicit and discuss the extent to which the school and teachers are embracing networked learning.

**2 Network Mirror** – a research intervention tool for visualising existing informal networks on particular topics, (based on social network analysis combined with groupware discussion software aimed at building a social learning agenda). The purpose of this method is to hold (latent) networks a mirror to reflect on their performance and sense of belonging.

**3 The Brain** - a network tool aimed at creating teacher networks based on what they can offer their colleagues in terms of learning products and services. This tool aims to facilitate supply and demand among teachers.

**4 Community barometer** - a barometer to provide frequent feedback on how a community is doing on the dimensions of community, domain and practice.

**5 Evaluation questionnaire** to find out to what extent certain interventions has lead to increased professional development / growth of teacher networks.



**6 Value creation stories** - qualitative methods for developing stories to highlight the value networked learning has for its participants.

In sum. Networked learning is an emerging area of research and shows promising results for understanding and facilitating professional development in practice. Research shows how access to extended personal social networks and communities provide a rich source for discussing, sharing and solving work related questions and problems. This presentation will present an overview of empirical findings and illustrates how ICT can facilitate and cultivate networked learning effectively. Implications and suggestions for practice-based and practitioner research on networked learning will be discussed.

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**Keynote presentation by Prof. Dr. Filip Dochy**

19/11/09 15.30 – 16.45 Main conference room

**Learning in teams and networks in education and professional practice: Results of Research and Theories**

This lecture starts from a study on efficiency of learning in teams and explains the factors that influence team learning processes and that are crucial factor in team learning. 7 years of research on facilitating team learning point at the importance of team learning behavior. Our own studies and those of well known colleagues such as Salas and Johnson show that research evidence is consistent and reveals five essential element of cooperation that are of importance for learning in practice. Examples from different fields are given. New developments that are crucial for learning in schools, and for learning of professionals are explained: expansive learning, network learning, learning regions, and innovative knowledge communities.

**Keynote presentation by Otto Herz**

20/11/09 14.00 - 15.30 Main conference room

## **Regional landscapes of education and learning - A concept for educational practice**

Where do we learn best, most intensive and with high sustainability? In classrooms that show little to none stimulation and charm? Or rather in realistic, authentic, complex places without intended didactical background? And who makes learning fascinating for us, takes us on adventures to discover, which we would usually avoid taking? And what kind of rhythm of time fosters learning in an experimental and cognitive way? Minute-wise synchronisation? Spaces of time that result from the idea that we stay focused until we find any kind of insight? Regional landscapes of education and learning propose an invitation to facilitate the 'de-schooling'. For the sake of social and factual competences, let us discover and explore regional landscapes of education and learning."

<b>Paper 1:</b>	18/11/2009	13.00 – 13.40	Room Erato
<b>Presenter:</b>	<b>Peter Iserbyt</b>		
<b>Title:</b>	<b>Enhancing Reciprocal Learning with Task Cards</b>		
<b>Theme:</b>	Innovative teaching and/or learning methods/techniques		

### **Research question/problem**

Research in peer tutoring often describes comparative research, aiming at investigating whether peer tutoring generates similar results like the more traditional, teacher-centred format of instruction. After we conducted a field study like this, we decided to focus on the peer tutoring setting itself. Within this setting, we tried to discriminate significant variables affecting the structure, the cooperation process and consequently the learning outcomes as well. The goal was to enhance learning outcomes in this setting, and to map the learning process between peers by analysing the behaviours and interactions during learning.

### **Link to the conceptual framework/literature**

There is a clear link between peer tutoring and social constructivism. According to this theoretical framework, teaching and learning are highly social activities. Consequently, interactions with peers, teachers, and task cards (instructional tools) can affect learning. Also, we assume that a Zone of Proximal Development (Vygotsky, 1978) can be created when a peer tutor with task cards instructs a tutee.

Also, by analyzing learner behavior and interactions we try to map the learning process. As a result, we rely on social constructivism as a framework and previous research to explain our research outcomes.

Furthermore, our research is linked to the literature of self- and peer assessment, as we investigate the effect of these assessments on learning outcomes.

### **Procedure and/or instruments used to explore the question/problem**

In total, we would like to present four studies: one field study and three lab studies. In the field study, a peer tutoring setting was compared to the teacher-centred format of instruction. In both settings, students learned to play tennis patterns over a four-week period. Student -and teacher behaviours were investigated, as well as learning outcomes. For most analyses, ANOVA was used.

In the lab studies, students were assessed before (baseline), immediately after (intervention), and two weeks later (retention). Students learned Basic Life Support with task cards as instructional tools. The effect of instructional guidance variables like role switching and role definition was investigated on learning outcomes. Also, it was evaluated whether implementing self-or peer assessment is beneficial for learning. Behaviour and interactions were analysed to understand the learning process. Data were analysed using ANOVA.

Some assessments were executed by multiple observers. Consequently, intra -and inter observer reliabilities were calculated.

### **Findings/results**

\* Results from our field study indicate that peer tutoring generates similar learning outcomes as the teacher-centred format of instruction. Yet, it could offer more opportunities to address social goals.

\* Results from the lab studies indicate that implementing role switching and role definition enhances skill retention. Analysis of learner behaviour and interactions are put forward to explain this.

For self-assessment, no beneficial effect on learning outcomes was found. The lack of pretraining, the obtrusive nature of self-assessment in this study, and the absence of objective skill criteria during self-assessment procedures are put forward as explanations.

Results for the final lab study indicate that peer assessment has an immediate, however small, impact on skill retention.

### **Significance for educational practice and/or policy?**

It is significant because it provides practical guidelines for the implementation of reciprocal peer

tutoring with task cards in everyday practice. It offers insight in the learning process because of the analysis of behaviours and interactions. Consequently, it helps teachers in the field to understand peer tutoring, and to successfully organise this learning setting in their everyday practice.

<b>Paper 2:</b>	18/11/2009	13.00 – 13.40	Room Klio
<b>Presenter:</b>	<b>Jean Gordon</b>		
<b>Title:</b>	<b>"I feel a responsibility... to be doing the job well" Personal and organisational capabilities for using knowledge in social work practice</b>		
<b>Theme:</b>	Learning in school, the workplace and communities		

### **Research question/problem**

There is a drive in the UK to develop the knowledge base of social care practitioners and to increase research literacy in public services. However, our understanding of how to improve use of evidence in practice is not well developed, and the perspectives of social work practitioners have received little attention. This research aimed to investigate how social workers make use of research, inquiry, and other forms of knowledge evidence to inform their practice. More specifically, it asked:

1. What forms of evidence do social workers draw on in practice?
2. How do social workers understand and draw upon knowledge evidence?
3. What conditions (such as skills, training, values and organisational culture) support good practice in the use of evidence to inform practice?

This presentation will focus on findings relating to the third research question.

### **Link to the conceptual framework/literature**

The research uses a critical best practice approach which draws on critical theory as an interpretive framework to describe and analyze examples of good practice to promote understanding and practice development. The approach suggests that there are major gaps in our understanding of the nature of 'good practice' in social work, which can best be analysed from the perspectives of individual practitioners and others involved in practice (Ferguson, 2003). This study also draws on narrative approaches to research which assume that when we tell stories we convey messages about the meaning or understanding we have gained from our experiences.

Ferguson, H. (2003) Outline of a critical best practice perspective on social work and social care, *British Journal of Social Work* 33, 1005-1024

### **Procedure and/or instruments used to explore the question/problem**

A critical best practice approach involves detailed description and analysis of 'live' social work practice drawn from real events and cases. The methodology was a qualitative one, and involved in depth face to face interviews with six social workers in Scotland. A variant of Osmond and O'Connor's "knowledge map" (2006: 9) was used as a tool to stimulate practitioners' reflections on how they used knowledge in specific examples of social work practice. Interviews were recorded and transcribed, and each interview transcript was analysed by identifying and coding recurrent themes from the social workers' accounts, identifying patterns, themes, and trends which related to the research questions.

Osmond, J. and O'Connor, I. (2006) Use of theory and research in social work practice: Implications for knowledge-based practice, *Australian Social Work*, 59.1, pp. 5-19

### **Findings/results**

The focus of this presentation will be research findings about what supports best practice in using evidence for social work practice.

Both personal and organisational capabilities for evidence use were highlighted. Social workers' personal capabilities included motivation, persistence, flexibility, and openness to learning and knowledge sharing. These personal capabilities interacted with organisational capabilities that both supported and limited use and sharing of knowledge. The findings stressed the importance of aspects of social workers' working environment, including access to supervision, and regular opportunities to reflect on and share knowledge with colleagues within and outside their workplace. The social workers sometimes had to overcome barriers, including, in some cases, lack of confidence about articulating their use of research findings and theory to inform practice, and, in some instances, organisational cultures that saw updating knowledge as a 'luxury' rather than a necessity.

### **Significance for educational practice and/or policy?**

A critical best practice approach is essentially solution focused, providing "examples of ways of working that work" (Ferguson, 2003). An understanding of both personal and organisational

capabilities suggests a range of ways in which workplaces and learning providers can support and grow best practice in knowledge use and exchange. The presentation will also explore links between the research and a recent development in Scotland, 'The Framework for Continuous Learning in Social Services', a tool for staff learning and development which focuses not only on the qualifications, training, and knowledge that practitioners in social services require, but also the personal and organisational capabilities that support good practice.



<b>Paper 3:</b>	18/11/2009	13.00 – 13.40	Room Römer
<b>Presenter:</b>	<b>Niek van Benthum</b>		
<b>Co-presenter:</b>	<b>Frank de Jong</b>		
<b>Title:</b>	<b>A generic capacity model as a scaffold for guiding, study career coaching and assessing directed towards students' growth on generic capacities</b>		
<b>Theme:</b>	Professional development - teacher(s) and training in the professions		

### **Research question/problem**

Students at Stoas Professional University work on and prove to be competent on specific task competencies of professional situations.

Problem however is that students' growth on competencies which arise above and extend the professional situation are not made explicit and thus study behaviour, guiding, study career coaching and assessing are not focussed on development of generic capacities during the whole curriculum in a more cumulative way.

Therefore a model of generic capacities was constructed and will be implemented with the following research questions.

What is the effect of implementation of the use of a generic capacity model with grow indications on:

1. Guiding students in professional situations
2. Students' growth on generic competencies
3. Interactions in study career coaching
4. Assessing students' competency in the professional situation

### **Link to the conceptual framework/literature**

According to Van der Wel and Van Heijst (2009) competence based education means that students learn to act in professional situations in which they acquire knowledge, attitude and abilities, to develop capacities in an integral way. Elementary features in the idea of what capacities are, the contextual bound character in order to determine growth and the relation with tasks and activities (Van Merriënboer, 2002). Someone is task competent when in a given context, the tasks are performed in a way that contributes to achieving the goal (Luken, 2006). Besides task competent, Cluitmans en Dekkers (2009) also distinguish behavioral competences, defined by Luken (2006) as 'generic abilities, distinctable in concrete behaviour'. However the problem is that the development of generic capacities extent the boundaries and focus of task or situational competencies which are just the bricks to build with.

### **Procedure and/or instruments used to explore the question/problem**

The specific task competencies of the curriculum of the Stoas Professional University are clustered under the generic SHL competences of Bartram. This clustering was validated by a selection of lecturers. For each of the SHL competencies a rubric was developed to make it possible to analyse students' competence growth.

In the next phase in the experiment, a questionnaire, video-recordings and interviews are going to be used to examine the effect of the generic capacity model on the guiding of students, on the interventions in study career coaching and on assessing students' capacity development over the boundaries of the professional situation. All three instruments will be used in a pré-, mid-term- and post-experimental status.

Students' growth on generic competencies is examined by comparing the levels of working on competencies between the experimental- and the control-group. The levels of working on competencies are operationalized in rubrics.

### **Findings/results**

The result concerns at the moment a capacity growth matrix with the relations between the specific task competencies within the professional situations and the generic SHLcompetences of Bartram which form the basis of the new competency model.

In September 2009 the rubrics used to diagnose students' level of capacity growth competencies are

definite and the pré-experimental scores on coaching students and interventions on study career coaching are measured. In October 2009 the pré-experimental scores on students' level on working on competencies will be available and shared with the participants in the conference.

**Significance for educational practice and/or policy?**

There are still a lot of different ideas about what competencies or capacities are and how to determine growth in capacity development. There is little theory about how to guide students on competency growth. The position and need of study career coaching is still unclear and a generic competency model might form a framework to develop study career coaching. If it is possible to measure competencies, there is still a lot unclear about how to measure competencies. This study contributes to the theory on guiding on capacity development and assessing.

<b>Paper 4:</b>	18/11/2009	13.00 – 13.40	Room Franken
<b>Presenter:</b>	<b>Laurent Leduc</b>		
<b>Title:</b>	<b>Can the Syllabus actually impact students' perceptions of a course regarding their personal needs and motivation? (Exploring consistencies between syllabi's qualities and benefit on students' attitude toward a course)</b>		
<b>Theme:</b>	Motivation and Emotion		

### **Research question/problem**

Faculties at the University of Liège, just like so many of their academic colleagues worldwide, have to write and orally present a syllabus for each of their courses every year. Although very demanding, this effort is clearly described by many authors as an important opportunity to make a decisive first impression and to favourably affect students' attitude and perceptions toward a given course regarding their personal needs and motivation notably. Even if the hypothesis seem plausible and inspiring for practice at first sight, the likelihood of a given syllabus to actually impact those perceptions in the right way still has to be experienced. So, for a given syllabus, will consistent effects be observed on the students who have read / heard it?

### **Link to the conceptual framework/literature**

Among the students' perceptions that an effective syllabus would be likely to positively impact according to the literature, some appear to correspond to the determining factors of the motivational dynamics' model from Viau [1997]: the perception of controllability [Bain, 2004; Lang, 2006; Hudd, 2003], the perception of activities value [Wasley, 2008, Hammons & Shock, 1994; Johnson, 2006] and the perception of competency [Slattery & Carlson, 2005; Madson, Melchert, Whipp, 2004]. Other theoretical benefits of the syllabus on students' attitude refer to the "consideration of what students need in order to be successful learners" [Hess & Whittington, 2003] or the support of "developmental needs of the students" [Haugen, 1998]. Here, items used to check learners' perceptions and to observe if "the syllabus addresses the question of whether the class will meet student needs" [Birdsall, 1989] have been closely related to the levels of Maslow's Hierarchy of Needs Chart.

### **Procedure and/or instruments used to explore the question/problem**

In 2008, within its mandatory program of pedagogical training for new faculties, the IFRES (Institute for Training and Research in Higher Education) has created a thematic seminar offering guidelines to promote syllabi aiming notably to motivate students and meet developmental needs. At the beginning of the following academic year, ten syllabi and introduction speeches - meant to Freshmen or Sophomores and designed by ten faculties who followed the seminar - were collected and recorded in order to be analyzed. Their likelihood to impact the targeted students' perceptions was then rated according to criteria rigorously derived from literature. During the second class of the ten teachers, questionnaires were submitted to their 1300 First/Second-Year students in order to investigate the possible corollary impact of those transmitted pieces of information on their concerned perceptions. In order to measure hypothetical gains due to syllabi, couples of symmetrical pre and post items were included.

### **Findings/results**

Data collected from the students concerning their perceptions and their answers about their reading / hearing or not of their respective syllabi /oral speeches are currently crossed. Chi squares are calculated to identify significant relationships between them, as well as correlations indexes. Afterwards, synoptic tables are produced to observe consistencies between ratings of teachers' performances and students' levels of declared perceptions. At this stage, it appears that variables regarding motivation are clearly independent for about 2/3 of the studied relations. Nevertheless, considering the cases where the  $X^2$  test indicate links between the data, concrete consistencies can be observed between the ratings obtained from the content analysis of syllabi or speeches and the observed percentages of students declaring good perceptions. Besides, the comparison of the percentages of students declaring good perceptions before and after having received syllabi and speeches clearly indicate frequent consistencies with the syllabi's ratings on the same variables.

### **Significance for educational practice and/or policy?**

Looking at the impressive number of universities everywhere asking or urging their teachers to produce syllabi for each of their courses, it seems obvious that this task has become a classic in any faculty's pedagogical practice. This generalization also seems to indicate a consensus on the fact that this effort

make sense and can be useful, particularly for students. This research aims to objectify this usefulness in order to guide and promote professors' reflection on effective syllabus - for instance in the context of a regulated training seminar -, especially since it is also considered to benefit as planning tool for faculties [Littlefield, 1999; Matejka & Kurke, 1994 ; Sinor & Kaplan], or as permanent record for promotions or program consistency [Parkes & Harris, 2002; Leibow, 2003 ; Seldin, 1998].

<b>Paper 5:</b>	18/11/2009	13.45 – 14.25	Room Erato
<b>Presenter:</b>	<b>Susan Picker</b>		
<b>Title:</b>	<b>Self-Management Via Clear Expectations: Using "The Principles of Learning" to Facilitate Student &amp; Teacher Competencies</b>		
<b>Theme:</b>	Innovative teaching and/or learning methods/techniques		

### **Research question/problem**

The problem arose with teachers complaining that students (grades 6-10 in the subject area of mathematics in 3 inner city schools in New York City) were passive and unmotivated and weren't coming to class prepared with notebooks, pens, pencils, etc. It reached a point that teachers were letting students leave their notebooks in school, further perpetuating the perceived passivity. The question then was: How do we get our students to become motivated and become agents of their own learning?

### **Link to the conceptual framework/literature**

"The Principles of Learning" is a document of 9 principles of learning which are condensed theoretical statements. They summarize decades of research into learning by a team of researchers at the University of Pittsburgh in the U.S. led by Dr. Lauren Resnick. The Principles state that "Intelligence is learnable and teachable".

The two principles which form the basis of this action research project are the principles of "Clear Expectations" and "Self-Management." They are flip-sides of the same coin, as "Clear Expectations" involves the work of teachers as they set up rubrics, parameters and guidelines for students. The "Self-Management" principle makes clear to students what is necessary for their own success and what those strategies are which good students employ.

### **Procedure and/or instruments used to explore the question/problem**

Teacher created rubrics were introduced to students and the conversation in the classroom changed to one which stressed students' responsibilities for self-management. This included modeling for students what their self-management should look like.

Conversations among teachers also changed to ones which explored these ideas and explored the clear expression of these ideas to students and in turn, this affected all aspects of teacher planning.

### **Findings/results**

This project began in late Spring, 2009 and will now be the basis of the new Fall 2009 term. Preliminary results indicated that as more students were clearly aware of what was expected of them and found increasing success in the subject of mathematics, there was increasing peer pressure on students who were less engaged in self-management. Students began coming to class prepared and increasing numbers of students brought their notebooks back and forth as that became a personal goal among their clearly defined personal goals.

Teacher planning and conversation also changed and became more thoughtful regarding students' needs for clear expectations.

More results will be forthcoming during the first two months of the Fall 2009 school term.

### **Significance for educational practice and/or policy?**

Teachers stated that these twin ideas of clear expectations and self-management were new to their thinking and changed their planning and thought regarding their teaching. Instead of complaining they became intent on trying to solve the fundamental causes leading to those complaints. Students were then guided into more mature and active habits of mind in the classroom. Both students and teachers began to feel more hopeful and successful.

<b>Paper 6:</b>	18/11/2009	13.45 – 14.25	Room Klio
<b>Presenter:</b>	<b>Luciana Caffesse</b>		
<b>Co-presenter:</b>	<b>Teresa Guasch</b>		
<b>Title:</b>	<b>Foreign Language Teachers' Overexposure to Change and ICT Integration Into Professional Practice: A theoretical Analysis</b>		
<b>Theme:</b>	ICT and benefits for learning		

### **Research question/problem**

Why may foreign language teachers find it difficult to integrate ICTs to professional practice?

Teachers of foreign languages (TFL) are exposed to two major environmental changes affecting the educational paradigm. One is the increasing need to learn foreign languages due to globalization, growing mobility, migration and tourism, and the other is the dizzy development of technologies facilitating student communication and contact with the target language and culture.

Additionally, TFL are now expected to adjust and exploit the ICT variety --applicable to or thought for education-- to enhance instruction and foster collaboration among students and with peers.

This exposure to changes together with characteristics of foreign language teachers and teaching that make them different from other subject matters' (Borg, 2006) entails a particular ICT integration process to TFL professional practice.

### **Link to the conceptual framework/literature**

From a socioconstructivist approach, we covered scientific work and current policy on TFL practice, professional development, practice differences with other disciplines', and teacher competency framework adjustments for ICT-based instruction and continuous education (Beetham and Sharpe, 2007; Klein et al., 2004; Mac Labhrainn et al., 2006).

Sources of bibliography included:

- European and national linguistic policy, scientific studies extracted from official document banks (Kelly & Grenfell, 2004);
- Studies developed by relevant authors contributing to the subject: T.Anderson, S.Borg, J.C.Richards, J.M.Vez, Y.Zhao, etc.;
- Databases like ERIC, ICYT (Science and Technology) and ISOC (Social Sciences and Humanities), focusing on specialist journals of high scientific prestige like Language learning; Language Learning&Technology; Language Teaching Research; Research in the teaching of English; Language and Education, Computer Assisted language learning; and Innovation in Language Learning and Teaching;
- Scientific output from the past ten years, when ICTs started to be introduced into teaching.

### **Procedure and/or instruments used to explore the question/problem\_**

This paper summarizes and reorganizes important information of various sources, traces the progression of changes teachers have been required to cope with, and provides a solid background for the further steps of a PhD dissertation on foreign language teachers' cognitive and social competences. This work set the framework for the design of the dissertation methodology, research questions and hypothesis.

Scientific and policy data from European and North American sources were covered, and theoretical and empirical data in the literature reviewed was screened, classified and analysed. Data analysis was conducted from the psychology and educational perspective. More specifically, data included statistical results from national and international assessments and evaluations of language learning and teaching performance, surveys of foreign language and other subject teachers' perceptions, studies on the progress of ICT integration into educational settings and professional development programs, etc.

### **Findings/results**

This literature review confirmed that research in TFL perceptions of ICT integration to their professional practice has been neglected. It also set a key framework to further research on foreign language teachers' critical position in effective uses of ICTs both for instruction and for continuous professional

development. Results should shed light on the friction between theoretical approaches, and foreign language teacher constructs on professional practice.

This work sets the path for the next steps of research as a constituting part of a PhD thesis focusing on professional development in the field of foreign language teaching associated to the use of ICTs. This includes pre- and in-service teachers and their attitude towards ICT use for instruction as well as for long-life learning. Research methods to be used in the thesis include surveys in the form of written questionnaires, personal interviews, and developing an ad hoc online collaborative teacher network.

#### **Significance for educational practice and/or policy?**

It refers to the situation experienced by millions of teachers of foreign languages (TFL) as a result of appreciable and ongoing changes in their educational and social environment.

Teachers undergo pressure to let ICTs enter the classroom, and affect how they are used. If not used properly, ICTs cannot exercise their educational power.

The realization of the above may help to produce changes in the two following categories of issues related to teachers and technology (Zhao & Tella, 2002):

- preparing teachers to effectively use technology as a pedagogical and professional tool to achieve greater educational outcomes, and
- how to use technology in teacher education to prepare more versatile and better skilled teachers by making changes in their educational environment.

Also, better ICT skilled TFL involve themselves in lifelong learning.

<b>Paper 7:</b>	18/11/2009	13.45 - 14.25	Room Römer
<b>Presenter:</b>	<b>Maarten de Laat</b>		
<b>Co-presenter:</b>	<b>Peter Putter</b>		
<b>Title:</b>	<b>Networked learning in education; the development of a scan to determine feasibility of networked learning in educational organisations</b>		
<b>Theme:</b>	Professional development - teacher(s) and training in the professions		

### **Research question/problem**

The main focus of this study is to understand how teachers develop and cultivate networks for their professional development. All participants face a similar innovation –implementation of a societal practical period for their students. This is a recent development, and they can learn and benefit from each other by sharing their experiences and developed products. They are spread over a large number of schools. A networked approach towards learning and development would suit to their needs. The study starts with describing spontaneous networked learning activities and uses them as a starting point for gradually cultivating them. As such this is a practice-based research project where organisational and social aspects of networked learning are studied in order to have a phased implementation of networked learning activities around this teacher led innovation.

### **Link to the conceptual framework/literature**

Networked learning is becoming a well established approach in the context of social learning theories and practice (McConnell, 2006; Goodyear et al., 2004; DeLaat, 2006; Siemens, 2004). Its relation to the networked society (Castells, 2000) with the ever growing use of ICT and social networking on the Internet makes it a relatively easy to apply framework for professional development. Research shows that having an extended network is crucial for personal and professional development (Granovetter 1973; Levin and Cross, 2004). In the field of teacher development some key studies in the benefit of networked learning underline these developments (Lieberman and Wood, 2002; Dresner and Worley, 2006; Earl and Katz, 2007). These studies are concerned with the added value teacher networks are having for the implementation of innovations, teacher development and school leadership. The results and models for support developed through these studies serve as a framework for this project.

### **Procedure and/or instruments used to explore the question/problem**

Understanding networked learning is a complex undertaking. Many variables interact (ranging from school, cultural to personal aspects). Therefore this study employs a multi-method approach in order to triangulate data from questionnaires, interviews and social network analysis (SNA). This methodology serves as a mirror for the organisation and teachers involved. In several steps data is collected and interpreted by a focus group (2 researchers and 7 teachers/school leaders) to advise on the next step. In total 70 participants took part in this study. SNA was used as a first step in the design to locate spontaneous teacher networks. These results were interpreted by the focus group and informed the next step – whole group online discussion collecting experiences and ideas on networked learning for their innovation. These results were interpreted by the focus group offering advice on several actions on how to cultivate networked learning between the schools in this project.

### **Findings/results**

The data suggest that teacher networks are still very isolated and provide important empirical evidence on the extent to which teachers act as knowledge (net)workers. SNA visualisations show little reciprocal communication and the networks found are relatively small. Yet we found a large number of them. Second these networks seem to be clustered around groups of schools in the same region even though this innovation is already 2 years underway. In contrast the online group discussion with the entire research population showed keen interest to share experiences and develop products collectively amongst all schools. After discussing with the focus group on how to use this data to benefit networked learning a plan to further facilitate this process is executed. The main goal was to start improving the connections within the clusters by setting up an email list. Secondly we host 'networking markets' in September for active sharing and socialising.

### **Significance for educational practice and/or policy?**

The relevance of this project to educational practice is very high as the project provides research driven insight in how teachers develop networks to support the development of their own daily practice. Too little is known about how teachers learn informally from each other in and around their workplace and



teachers are often seen as acting on their own being focused on their own students. Increasingly research emphasises the need for social learning in communities and networks when it comes to professional development. Though how this can be implemented in practice with the support of the teachers is a much overlooked area. This project seeks to shed some light on these complex issues from a practice-based research approach. In time results will inform policy on professional development and school leadership.

<b>Paper 8:</b>	18/11/2009	13.45 – 14.25	Room Römer
<b>Presenter:</b>	<b>Rul von Stülpnagel</b>		
<b>Co-presenters:</b>	<b>Janette Schult, Melanie Steffens</b>		
<b>Title:</b>	<b>Is learning by doing superior to learning by viewing? More evidence of similarities than of differences.</b>		
<b>Theme:</b>	Learner Diversity and differentiation in the learning environment		

### **Research question/problem**

Most people assume to remember actions better after carrying them out than after observation or verbal learning. This concept has been supported by action memory research: Better recall and recognition of single action phrases (e.g., “apply the patch”) is typically observed after enacting these phrases compared to verbal learning or observing someone else enacting them. The current series of experiments was designed to test whether this often reported “enactment effect” generalizes to the recall of action sequences. Such sequences resemble more closely to actions carried out in real life situations, and they differ in several respects from the common research paradigm to present arbitrary lists of verb-object phrases.

### **Link to the conceptual framework/literature**

Models of action memory converge on strong item-specific encoding of each action phrase through enactment at the expense of encoding the relations between action phrases. Relations between action phrases should be present in any applied context where ordered sequences of actions need to be learned that are all related to an overarching goal (e.g., “changing a flat tire”). Thus, learning action sequences by observation should profit more from the presence of relations between action phrases than learning by enactment. As a consequence, it is possible that the enactment effect often reported for artificial laboratory materials does not generalize to applied contexts.

### **Procedure and/or instruments used to explore the question/problem**

In a first series of three experiments, single actions and action sequences were presented auditory and enacted or observed, respectively, without real objects. Recognition and free recall test were applied.

In a second series of experiments, participants learned action sequences (e.g., tying a knot) by either performing them with the actual objects, by watching a video clip, or by a visual instruction. Performance tests were applied where the learned action sequences had to be repeated with the actual objects. ANOVAs were used for most analyses.

### **Findings/results**

Although we replicated the expected enactment effect in recognition (series 1), no general differences were found in free recall (series 1) or performance tests (series 2). Thus, our findings imply that under many circumstances observation is as good a learning strategy as enactment.

In the second series, we found some evidence that previous experience with the to-be-performed action is a relevant factor for memory performance: There were little differences between more or less experienced participants that had learned by performing the action sequences or watching video clips, but in the instruction learning condition, people with high experience performed better than people with low experience.

### **Significance for educational practice and/or policy?**

The idea that learning by doing is superior to learning by viewing is part of many theories in educational psychology. It is also corroborated in the action memory literature. Our findings imply that this may not be the case generally. There is also evidence for factors that are beneficial to one learning condition or the other. This may enhance our knowledge about the adequate learning style according to kind of material and situation.

<b>Paper 9:</b>	18/11/2009	14.50 – 15.30	Room Erato
<b>Presenter:</b>	<b>François Lombard</b>		
<b>Title:</b>	<b>Knowledge confrontations for deep understanding in science : findings from 7 years' experience in designs</b>		
<b>Theme:</b>	Innovative teaching and/or learning methods/techniques		

### **Research question/problem**

What learning design features can encourage positive socio-cognitive confrontation to foster deep scientific understanding in info dense learning environments? Social competencies are framed here as means for better learning.

### **Link to the conceptual framework/literature**

Literature suggests that students can build knowledge by interacting with others (Bruner, 1960) around conceptual artifacts (Bereiter, 2002). This requires appropriately scaffolded learning environments, in which cooperation rather than competition is developed. Careful organization of confrontations around knowledge (Buchs, Butera, Mugny, & Darnon, 2004) between students is fostered so as to encourage epistemic rather than relational regulation of conflicts. One of our goals is developing transferable social competencies that allow constructive conflict of ideas. Networked learning designs were refined in order to favor positive confrontations, and analysed.

### **Procedure and/or instruments used to explore the question/problem**

We refined over 7 years successive designs of IBL (IBL Workshop Collective, 2001) based on communities of learners (Scardamalia & Bereiter, 1996)

Surveys were administered to students, and from these same students later, at university (follow-up) about perceptions of their autonomy in handling info dense environments, knowledge building and cooperative learning.

A Wiki-based shared knowledge space supported the designs, the server automatically records previous states of the pages : history data. The history of selected Wiki documents is analyzed (stratigraphic), successive Wiki records are compared (yearlong analysis), and successive iterations over the years reveal evolution of the design (longitudinal analysis) (Lombard, 2007).

In-class observers held journals and other informal data was recorded.

Data are analyzed about attitudes towards cooperation, knowledge building and educational outcomes

### **Findings/results**

Students declared having acquired efficient learning strategies for university and felt well-prepared for learning in an info dense world. Analysis of wiki data is ongoing (Design-Based Research is a continuous process) and preliminary results are available. Survey results are available. Cooperation and confrontation of ideas emerges as being a crucial aspect of such designs. Confrontation was positively noted, and was seen in the wiki records, but attitudes towards collaboration are paradoxical and seem linked to autonomy in developing their ideas and validating scientific knowledge by evidence rather than authority. The effects of some design features on attitude to interdependency and personal responsibility and the type of learning goals seems decisive.

### **Significance for educational practice and/or policy?**

Policies and incentives geared towards preparing for an information society often frame the problem is as an individual process. Theoretical research, and our own research suggests deep scientific understanding can best be developed by positive socio-cognitive confrontation within learning communities. Examples of such designs for knowledge building strategies in complex info dense environments in regular school context are not very common. We will attempt to generalize design features to develop knowledge-centered confrontation and discuss their limits.

<b>Paper 10:</b>	18/11/2009	14.50 – 15.30	Room Klio
<b>Presenter:</b>	<b>Frank Cornelissen</b>		
<b>Co-presenters:</b>	<b>Tjip de Jong and Joseph Kessels</b>		
<b>Title:</b>	<b>Views upon knowledge and its implication for studying learning in organizational networks</b>		
<b>Theme:</b>	Learning in school, the workplace and communities		

### **Research question/problem**

Academic research activities within organizational studies are increasingly focusing on studying networks in order to understand processes of knowledge and learning that lead to professional knowledge development. In the last decade organizational infrastructures that enable learning are regarded as learning communities in which the emphasis is put on social processes of learning and the situated context in which it takes place. Those enabling infrastructures are often conceptualized as networks through which knowledge development; knowledge transfer and change take place. In studies very different paradigms, definitions and categories of knowledge are operationalized. For successful studying knowledge processes and learning in organizational networks a synthesis of different theories is necessary.

Main research question: 'What are the implications of adopting different viewpoints upon knowledge for studying learning from a network perspective?'

### **Link to the conceptual framework/literature**

In the last decade organizational infrastructures, which foster processes of knowledge and learning, are regarded as learning communities in which the emphasis is put on social processes of learning and the situated context in which it takes place (e.g. Wenger, 1998; Engeström, 2004). Those enabling infrastructures are often conceptualized as networks through which knowledge development, knowledge transfer and change take place (e.g. Capra, 2002, Jackson & Temperly, 2006). Subsequently, in present research analyses are extended to the level of the intra/inter organizational network (Tynjälä, 2008). A growing number of studies into knowledge processes and learning within the fields of Organizational Development and Human Resource Development adopt this extension to the network level (e.g. Kessels & Poell, 2004). However, it is remarkable that in many studies fundamental different viewpoints on knowledge are used to study knowledge processes and learning within an organizational network (Borgatti & Foster, 2003).

### **Procedure and/or instruments used to explore the question/problem**

In order to answer the research questions a literature review of views upon knowledge, learning and social networks was conducted through a search in the digital databases of Web of Science, Scopus, ERIC and Google Scholar. The key words used in this literature research included: knowledge paradigms, knowledge categories, knowledge development, information sharing, knowledge use, knowledge networks, learning theory, social network theory, social network analysis and social capital. The review mainly focused on literature in the domains of HRD and OD. These two bodies of literature were selected, because it was expected that they would provide important insights in the related domains of knowledge, learning and networks as well as in the specific connections between the three concepts. The selection offered several suggestions for other relevant literature that were also included in this study.

### **Findings/results**

In distinguishing between different perspectives on studying social networks and their consequences Borgatti and Foster (2003) developed a useful typology. In an extensive review of social network studies they found explanatory goals to differ in their focus on (performance) variation or (social) homogeneity. In the mechanisms used in the studies to explain such variation or homogeneity they found a distinction between structuralist and connectionist network perspectives. We used this model to explore how the different views upon knowledge and learning relate to this typology of social networks. This resulted in a preliminary conceptual framework which relates perspectives on knowledge and learning principles to various approaches of social networks studies.

### **Significance for educational practice and/or policy?**

Our literature review could offer educators, researcher and policy makers more insights in what ways you can look at knowledge and learning in a network. Such views upon knowledge are often

fundamentally different and each of these views has important implications for ideas on knowledge development, sharing and use in a network. This study gives insights in the way such processes of knowledge and learning could (or could not) be studied and evaluated. Many times in such studies/evaluations only explicit forms of knowledge are taken into account. We argue that for successful studying knowledge processes and learning in organizational networks a synthesis of different network approaches, which incorporate explicit and tacit forms of knowledge, will be helpful.

<b>Paper 11:</b>	18/11/2009	14.50 – 15.30	Room Römer
<b>Presenter:</b>	<b>Marieke Thurlings</b>		
<b>Co-presenter:</b>	<b>Marjan Vermeulen</b>		
<b>Title:</b>	<b>Teachers providing each other feedback within reciprocal peer coaching: What does the literature say, and what does the practice say?</b>		
<b>Theme:</b>	Professional development - teacher(s) and training in the professions		

### **Research question/problem**

Feedback is considered as an important tool for learning (see e.g., Bing-You, Bertsch, & Thompson, 1998; Weaver, 2006) for almost 100 years. Many research has been conducted on feedback for pupils, students, and workers and on the possible effects of feedback on learning (Mory, 2003). However, relatively little research has been conducted on feedback among teachers (Scheeler, Ruhl, & McAfee, 2004), even though feedback is plausibly important in professional development, because teachers learn during these kind of activities. And, as is known, feedback is an important element in any kind of learning.

In this study, two research questions are addressed: What are important elements of feedback that influence learning and professional development, according to a selection of literature? and; Which of these elements can be observed within peer coaching?

### **Link to the conceptual framework/literature**

To address the first research question, we conducted a literature study which resulted in a distinction of seven categories of feedback variables. Based on these seven categories of feedback variables, several conditions for and effects of feedback were identified from the articles involved in the literature study. Then, these conditions and effects were listed. Next, this list was used to create an observational scheme, which will be used for observing feedback given by teachers in three successive peer coaching sessions, thus addressing the second research question. We especially focus on the content of the feedback, the verbal reaction of the feedback receiver, and on feedback for either novice or expert problem solvers.

### **Procedure and/or instruments used to explore the question/problem**

The literature study took five steps. First, we selected two publications as a starting point: one meta-review of feedback in general (Mory, 2003), and one meta-review on feedback for teachers (Scheeler, Ruhl, & McAfee, 2004). Second, six categories of feedback variables were distinct based on these publications. Third, to validate the robustness of these categories, the content of 18 articles on feedback were compared to the categories. Fourth, a seventh category was added based on these articles. Fifth, a list of conditions for and effects of feedback was made based on the seven categories featuring these articles.

Then, an observational scheme was developed based on that list. This scheme will be used for observing three groups of four teachers in three successive peer coaching sessions. These sessions have already taken place and were videotaped. The videotapes will be transcribed, and this transcription will be used to fill out the scheme.

### **Findings/results**

Three successive peer coaching sessions will be used to answer our second research question. Results of the first peer coaching session, which is already analyzed, show that our observational scheme does help in mapping the feedback provided by the participants. Second, the feedback given by the participants overall met the conditions and effects which were found during our literature study.

Furthermore, the transcripts of the first sessions revealed two new patterns of interaction, which both occurred frequently during the sessions. These kind of patterns were not described in articles from our literature study, and therefore patterns in interaction seem an interesting aspect for feedback research.

In September and October we will analyse the two other peer coaching sessions in order to validate the patterns found and to further investigate the given feedback.

### **Significance for educational practice and/or policy?**

By combining literature and practice we were able to gain more knowledge on feedback for teachers

themselves in the context of peer coaching. In addition, we were able to develop an observational scheme and test this during the study.

<b>Paper 12:</b>	18/11/2009	14.50 – 15.30	Room Franken
<b>Presenter:</b>	<b>Piet van der Ploeg</b>		
<b>Co-presenter:</b>	<b>Laurence Guérin</b>		
<b>Title:</b>	<b>Can we foster the development of empathy and sympathy through education?</b>		
<b>Theme:</b>	Research Methods		

### **Research question/problem**

How can education stimulate the development of empathy and sympathy and contribute in this way to prosocial behavior? According to many experts, professionals and laymen, it seems obvious: participatory democracy in the school, the school as caring community, collaborative and co-operative learning, learner-directed education and learner-centered practices. But for us, this is a misconception.

The development of empathy and sympathy is strongly determined by biological processes and conditions (genetics, hormones, temperament) and by the influence of parents (family context, parenting style, parental behaviour, parenting cognitions). We have to be modest about what education can bring about.

And if we can do something about it in our schools, then it is not through currently proposed innovations. What is known about the development of empathy and sympathy suggests other directions.

### **Link to the conceptual framework/literature**

There is little scientific research done on the effects of educational arrangements and practices on the development of empathy and sympathy. Furthermore, part of this research cannot be taken seriously because of methodological shortcomings and/of ideological bias. The remaining research shows that innovative education focused on the fostering of empathy and sympathy only “works” under exceptional or unique conditions and for specific categories of pupils. These results also make us suspect that what can be gained from education fostering empathy and sympathy is rather fragile (not solid and sustainable).

There is a lot of research done on the effect of parental and biological determinants on the development of empathy and sympathy. The results of this research offer us interesting and instructive starting points for answering the question of how education can foster empathy and sympathy.

### **Procedure and/or instruments used to explore the question/problem**

(On beforehand: conceptual clarification of “empathy”, “sympathy” and “prosocial behaviour”; reconstruction of the plausibility of the idea that education can stimulate social behavior and competencies through fostering empathy and sympathy”).

Inventory and evaluation of (1) scientific research on the influence of schooling and education on the development of empathy and sympathy. Discussion about the methodological and theoretical problems and shortcomings of some studies. Summary of the results of other, the better investigations.

Summary of the results of (2) scientific research on biological determinants of the development of empathy and sympathy and (3) scientific research on the effect of parenting and family context.

On the basis of what has just been summarised, results of (2) and (3) together, we explore the possibilities of stimulating the development of empathy and sympathy through education. We scrutinise these possibilities and compare them critically with currently proposed educational innovations directed at empathy and sympathy.

### **Findings/results**

There is not much to expect from educational innovations which try to stimulate empathy and sympathy. Current suggestions (participatory democracy in the school, the school as a caring community, collaborative and co-operative learning, learner-directed education and learner-centered practices) seem to be mistaken. They do not take into account what is known about the development of empathy and sympathy, especially the biological determinants and the effect of parenting.

What is known about biological determinants and the effect of parenting make us suspect that we must not be too optimistic about what education can bring about. It also teaches us something else: what we



CAN do en what we MUST NOT do, if we still want to do something about the development of empathy and sympathy or at least, not stand in the way of its development. We will present our findings.

**Significance for educational practice and/or policy?**

Critical reflection on school policies, educational innovations, pedagogical practices etc. which are directed at the fostering of social competences and prosocial behavior by way of stimulating the development of empathy and sympathy.

<b>Paper 13:</b>	18/11/2009	17.10 – 17.50	Room Erato
<b>Presenter:</b>	<b>Darren Mundy</b>		
<b>Title:</b>	<b>Choosing Their Own Lecture: Power Relations in the Lecture Room</b>		
<b>Theme:</b>	Innovative teaching and/or learning methods/techniques		

### **Research question/problem**

The main research problem focuses on engaging with ideas around innovating with the lecture experience moving from cultures of passivity through to cultures of interactivity in the lecture room. This paper outlines the results from a research project focused on investigating a technique to improve student engagement in the classroom through experimentation with non-linear lecture structures. A non-linear lecture structure encourages students to select what they wish to explore and engages student groups effectively in determining their own curriculum path. The contribution of this paper lies in the description of the transformation of the conceptual project idea into developed content and in the evaluation of the idea through the delivery of the content in practice.

### **Link to the conceptual framework/literature**

Lectures take many forms (Exley et al, 2004), we can basically take the concept of a lecture as the delivery of information to small or large groups of learners to promote understanding. According to McCloskey (in Nash, 1994) there are two ways in which we can deliver understanding, these are through metaphor or through storytelling. If we view lectures as a story and as narrative, then narrative structure is important. In general lectures are formed linearly defined as “a sequence of events...narrated from the beginning to ending without...possibility of a user altering the way” (Riedl et al, 2006). However, lectures can also be constructed non-linearly. Non-linear learning content has been investigated in relation to the development of applications to deliver non-linear stories, to hypermedia content and in film and video games. There is limited research in the application of branching narrative formats in physical lecture rooms.

### **Procedure and/or instruments used to explore the question/problem**

The concept of 'choose your own adventure' lectures has been explored through the development of six lectures with PowerPoint used as the medium to explore non-linearity in the lecture theatre. Ten students have been involved in a qualitative evaluation of the concept in practice through the method of individual interviews. The interviews have been used to evaluate explore perceptions on the technique; the concept of the changing power relationships caused by the technique and to indicate any improvements that could be made to the approach. In addition to the independent interviews, the module was also evaluated through a standard evaluation questionnaire and through practitioner reflective accounts.

### **Findings/results**

In shortened form, the students found that the technique from a positive point of view was "unique" and "inventive". They also found that they "liked that you could direct the way in which the lecture could go" and "could choose to ignore certain themes". More negatively students found that the way in which the selection of content was made in session could lead to individuals in the group not getting to see the choice that they have selected at any point during the lecture. The practitioner evaluation of the technique indicated increased engagement with modular content through discussion in group over content direction. The lecturers involved found it difficult to transform the concept into practice, initially, having concerns over transformations in power relationships in the lecture room environment and a few technological problems remain to resolve in relation to the developed PowerPoint lectures.

### **Significance for educational practice and/or policy?**

The tradition of the lecturer wandering off topic is highly relevant to the research presented in this paper. In traditional lectures the lecturer has complete control over the direction of the taught content. The research presented here questions that control structure and evaluates a shift of the power involved in lecture delivery to the learners giving learners the power to determine the next content direction. So in a sense it could be the students who choose to wander off topic if they so wish the lecturer to do so. There is very little research presently existing which deals with the practice of non-linear forms of lecturing, this paper adds to this research area through practical evaluation in the context of delivery in an undergraduate module.

<b>Paper 14:</b>	18/11/2009	17.10 – 17.50	Room Klio
<b>Presenter:</b>	<b>Ilkka Väänänen</b>		
<b>Co-presenter:</b>	<b>Sirpa Laitinen-Väänänen</b>		
<b>Title:</b>	<b>The interface between research project and students' learning</b>		
<b>Theme:</b>	Learning in school, the workplace and communities		

### **Research question/problem**

The aim of this paper is to describe the advantages, opportunities and challenges in integrating a large, regional “Good Ageing in Lahti Region” (GOAL) -research project into the bachelor student’s learning process. The research question was: How did the students, lecturers, researches and examinee subjects experienced the integration.

### **Link to the conceptual framework/literature**

Today’s challenge in higher education is to enhance the interface between students and workplaces. Conventionally clinical practice and placements have been forums for this kind of encountering. In addition, participation into the research and development projects offers students a chance to step outside into the work life and meet potential clients. In its bests, student has a change by participating into the research projects integrate theoretical and practical knowledge, test ideas, and contribute to the Mode-2 type knowledge creation. Under Mode-2 type of knowledge production the distinction between research and teaching tends to break down. In Finland, the universities of applied sciences have been expected to be more flexible in reacting to the regional needs and thereby contribute to the Mode-2 type of knowledge production with students and local partners like different organizations, and small and medium size enterprises.

### **Procedure and/or instruments used to explore the question/problem**

Over 130 bachelor students from social and health care degree programs (nursing, physiotherapy, social services) participated as research assistants to the “Good Ageing in Lahti Region” -research project in the province of Päijät-Häme in southern Finland. Their assignment was to arrange the 2817 examinee follow-up study in collaboration with other actors. The study included two questionnaires and clinical measures (weight, height, waist circumference, blood pressure). The integration of the research project to the professional studies was design by lecturers and researchers. At the end of the project a feedback/reflection meeting was organized. The data from students, lecturers, researchers and examinee subjects was collected by interviews, students’ learning diaries, observation notes, and a 360°- feedback questionnaire. The results were analyzed by quantitative and qualitative methods.

### **Findings/results**

Students found the practical skills rehearsing important and necessary prior to field work period. Students were afraid and tense in the beginning of the field work, afterwards the experience turned positive. Theory was “stupid and dull”, but the real work on the field was brisk to the “normal” studies. The examinee subjects found students friendly and customer-oriented although some mistakes and errors in measuring and in results occurred. Lecturers appreciated the researchers participation to the project. However, they wish minor students’ groups and longer field work period. Furthermore, the co-operation between degree programs was inflexible and they did not succeeded to integrate the practical field work to the theoretical studies well enough. The GOAL project and field work was not managed to integrate to student’s thesis and the faculty was not well enough informed about learning possibilities project served. Researchers found students participation challenging but very important and helping.

### **Significance for educational practice and/or policy?**

Universities need to be more synergistic institutions. R&D-integrated learning facilitates working life orientation and student-centeredness in curricula. Therefore it is highly challenged and motivated at the same time. This kind of new studying and learning method means a transfer from teaching to learning. The guiding principle in teaching and learning nowadays is the development of competences and learning situations that promote student activity. Development competence is one of the generic competences of UAS graduates in Finland and this kind of R&D-integration to the studies is quite holistic way to develop it.

<b>Paper 15:</b>	18/11/2009	17.10 – 17.50	Room Römer
<b>Presenter:</b>	<b>Valentina Giron</b>		
<b>Title:</b>	<b>Fostering the construction of shared teacher professional identities in an online educational context</b>		
<b>Theme:</b>	Professional development - teacher(s) and training in the professions		

### **Research question/problem**

Knowledge of the relationship between professional identity and professional knowledge/practice (Flores, Day, 2006; Loughran, 2006; Watson, 2006) has led many educational researchers to enquire into the modalities of professional identity construction.

The aim of our research was to find, describe and analyse the narrative and discursive processes of professional identity construction as activated in a specific on line educational context, by 13 in-service teachers. The research design was based on recent discursive and narrative approaches to identity studies (McAdams, Josselson e Lieblich, 2006; Gergen, Gergen, 2006) and Positioning theory (Harré, Van Langenhove, 1999).

It was hypothesised that the social interactions and shared narratives and discussions of personal/professional stories would allow professional identities to emerge or be constructed/reconstructed through the narrative resources available in the online context.

### **Link to the conceptual framework/literature**

The emphasis on “shared reflective practices” in fostering professional development (Conway, 2001; Urzúa and Vásquez, 2008) allows the situations or events that teachers recount to each other to be recognized as important instruments of professional development (Johnson, Golombek, 2002). These narratives reveal representations of the self as a teacher, in relation to reflections, relationships, acquaintances, practices, and professional experiences. These stories and narratives may then become the subject of research in order to recognize social processes of professional identity construction in in-service teacher education. This professional identity refers to a concept of identity which is not interpreted in the traditional sense as a unitary and biologically defined concept, but as a flexible, relational, continuously redefined construct, emerging from social actions that are carried out through the narratives.

### **Procedure and/or instruments used to explore the question/problem**

The research aims to enquire into the processes of professional identity construction through an analysis of the narratives that take place with or between teachers in professional contexts (Connelly, Clandinin, 1994; 2000).

The data analysed were texts produced during online discussions collected in the context of a laboratory website.

The preparatory phases of the analysis included organising the texts in textual corpora to be processed using the qualitative analysis software Atlas.ti.

The two-phased process of discourse analysis comprised:

- identifying the subjective positions assumed by participants in the narrative context and used as narrative resources (Holstein, Gubrium, 2000); assigning a descriptive code to each position; having another researcher examine and comment on the coded corpora for possible changes.
- Identifying the emergence of professional identity constructs, understood as clusters/networks of subjective positions, i.e. narrative positioning (Davies and Harré, 1990; Harré and Van Langenhove, 1998).

### **Findings/results**

From the qualitative data analysis we identified the emergent professional identities as products of the multiple positioning of participants in the social context. Identities are not perceived as preconceived and clearly-defined truths, but as clusters of the most relevant subjective positions (Harré, van Langenhove, 1999), which the participants refer to “in the course of” and “through” their shared narratives.

5 identities were found:

1. The “relational teacher”;
2. The “maternal” teacher” i.e. caring;
3. The “teaching professional”;
4. The “personal teacher”;
5. The “teacher in crisis”.

The 5 identity constructs allowed us to identify some central elements orientating the process of

professional identity construction in in-service teachers.

**Significance for educational practice and/or policy?**

It is important to highlight the effectiveness of the social context. The narrative interactions about personal/professional aspects create a climate of mutual trust and reliance (Turniansky, Friling, 2006) and underline each professional experience. In this environment, experienced teachers were able to engage in the dynamic process which leads people to seek a purpose and to (re)interpret their values and experiences (Flores, Day, 2006), which is a process of teacher identity construction.

Attention must also be focused on the online context. As suggested by many authors (Garrison, Anderson, 2003; Barab et al., 2004; Hiltz, Goldman, 2005), we can presume that the asynchronous, text based online environment may activate reflexive processes and a “shared sociality” (Benigno, Chifari, 2009) which allow teachers to construct meanings about the self and the professional world.

<b>Paper 16:</b>	18/11/2009	17.10 – 17.50	Room Franken
<b>Presenter:</b>	<b>Kate Meier</b>		
<b>Title:</b>	<b>Assessment of interpersonal skills in pre-registration nursing students: Realistic Evaluation of one tool used in one UK university</b>		
<b>Theme:</b>	Assessment and Evaluation methods/tools		

### Research question/problem

As anecdote and the literature attest, the assessment of students' interpersonal skills (motivation, attitude etc) is problematic in many professions. This study is a Realistic Evaluation of the Interpersonal Skills Profile (ISP) tool, adapted from work of Judith Knight at the University of Northampton, and introduced by a UK University as part of pre-registration student assessment in practice. Nurses who have 'mentor' status—who take students in addition to their daily clinical workload—are using the tool to assess pre-registration nursing students in the clinical areas associated with the University. The subgroup of interest in this study is 'borderline' students, and how the ISP tool is used for assessing interpersonal skills and delineating between a passing and failing student.

### Link to the conceptual framework/literature

There is extensive inter-professional literature available on the importance of interpersonal skills in professional practice. There is also literature addressing the difficulty in holistically assessing students in the profession and privileging content competence over interpersonal competence, as addressed in the conference website. The interpersonal skills profile is a simple and adaptable tool that attempts to uncover and clarify the implicit and covert assessment of personality and interpersonal skills that takes place in many professions. This study is a response to a gap in the nursing practice assessment literature and the wider literature on assessment in practice.

Realistic Evaluation (RE) is a research approach that attempts to answer the question, “What works for whom in what circumstances?” (Tilley, 2000 p4) based on philosophy of scientific realism. RE focuses on identifying context + mechanism = outcome.

### Procedure and/or instruments used to explore the question/problem

This is a Realistic Evaluation (Pawson & Tilley, 1997) study using a mixed methods approach. To date, Practice Education Facilitators (who support mentors but are not employed by the university) and Education Champions (lecturers at the university who support mentors and students in practice) have been interviewed using an evolving semi-structured interview guide. The analysis of these interviews will inform interviews with mentors in practice on experiences of assessment of borderline students. The results from these interviews will inform focus groups to be held with students at the University. Furthermore, documentary analysis of practice documents will examine the actual comments and ISP scores for a cohort of students regardless of level of achievement.

The analysis of interviews is by content analysis using Interpretive Description (Thorne et al 1997) and is based on identifying Context-Mechanism-Outcomes configurations (Pawson & Tilley). These configurations are then challenged in the next data set.

### Findings/results

PEF and EC interviews are complete and mentor and student data collection has not begun. However, CMO configurations have been identified and are being challenged.

Mechanisms being explored are:

- permission for mentors to comment on students' interpersonal skills
- earlier warning systems where students get feedback sooner in programme (formative element to assessment)
- the Explicit Assessment (context) normalises what is expected (criterion referencing rather than norm referencing)
- providing a physical place in documents to address concerns (not present in current documents)
- the tool is simple to use as statements are chosen therefore it gets completed

Outcomes being explored are:

- Students getting feedback and improving
- Mentors confident to comment on behaviour and attitude

- Behavioural and attitude problems identified prior to final placement

The study is ongoing, the aim is to complete data collection by spring 2010. Data analysis will continue to Winter 2010-11.

**Significance for educational practice and/or policy?**

This research is significant for educational practice in a wide range of professions that relate to the public. Interpersonal skills are identified as essential yet are a challenge to teach and assess. Many professions rely on apprenticeships or periods of practice-based learning, and this tool may provide professionals who are not educationalists with a mechanism and means for feeding back on students' interpersonal skills and for assessing them summatively. Students need to understand the basis of their assessment and for too long interpersonal skills have been unconsciously and implicitly assessed. Tools such as the ISP can contribute to clearer, more comprehensive assessment of the whole student and their practice.

<b>Paper 17:</b>	19/11/2009	09.00 – 09.40	Room Erato
<b>Presenter:</b>	<b>Gudrun Ziegler</b>		
<b>Co-presenter:</b>	<b>Sirpa Laitinen-Väänänen</b>		
<b>Title:</b>	<b>Designing development in diversified higher educational contexts: students' accounts of constructing expertise in multilingual academe</b>		
<b>Theme:</b>	Innovative teaching and/or learning methods/techniques		

### **Research question/problem**

Diversity of all kinds and at all levels in today's societies has pushed traditional views on expertise development and learning at its edge. Former ways of training professionals within universities are challenged by these demands. The purpose of this research is to examine types and accounts of expertise - related to multi-lingual, multi-cultural and multi-disciplinary diversity - as constructed by the students after having accomplished the first study year of the (research) Master program Learning and Development in Multilingual and Multicultural Contexts at the University of Luxembourg. This program is designed as a response to the aforementioned challenges by offering not only learning and expertise building about diversity, its contexts, and theoretical approachability, moreover, providing a set-up of diversity - in terms of cultures, languages, interdisciplinarity, multimediality and working formats.

### **Link to the conceptual framework/literature**

Socio-cultural approaches to learning and professional development highlight the importance of interaction with other professionals and the emergence of knowledge in and through these interactions. Having interaction at its center, language is argued to possess specific functions in constructing meanings in and as social practices. By means of these activities, participants construct, change, organize and remodel social realities. Doing things, explaining things to each other, assessing and accounting for the realities as experienced is accomplished by means of language and the multiple configurations which are co-constructed in interactions and other mediational activities allowing for expertise development in highly diverse settings. Following these grounds of reasoning, educational solutions which implement diversity - in terms of cultures, professional backgrounds and educational experiences - allow for configuring the working and learning together as widening and deepening of students' understanding and developing their conceptual and social skills to work and learn together.

### **Procedure and/or instruments used to explore the question/problem**

The data of this research is collected in two loops. First, which preliminary results are presented here, the students (n=20) have written an instructed journal of their first year professional development. These journals have been analyzed by applying discourse analysis (DA) in aiming to define the meanings related to their professional development. Second, the students' group meetings will be videotaped and transcribed. Then the analysis focus expands to examine the interactional ways to construct the professional development in multilingual and multicultural group. DA is used as a frame of reference and as a methodological tool in this research in alignment with conversation analysis with regard to workplace encounters. In sum, this research approach is concerned with answers to research questions as produced inductively through analyzing and interpreting the participants' perspectives on their learning as reality alongside with specifically produced but contextually valid artifacts pertaining meaning in the developmental process.

### **Findings/results**

Putting the specific case of a learning environment at its center, the current study provides conceptual and methodological insights allowing for defining elements for further intervention and implications of the design of expertise-bound learning environment in higher education. Firstly, the practices deployed for describing and accounting for incidents of expertise development as given by the participants indicate which (and if) patterns of such development can be represented, in relation to systematic diversity-bound accounts thereof and/or their constructions in terms of language-as-activity. Secondly, methodologies assessing development and its specific perception as held by the participants involved in such a process are discussed with regard to their suitability and the potential for sustaining the development of expertise as traced. Finally, potentials and conditions for interventions from the students' in diversity-bound developmental programs are outlined.

### **Significance for educational practice and/or policy?**

Little empirical and case-valid work has been done that focuses on the social elements in professional development in multilingual and multicultural context in order to a) better grasp the issue of expertise



and b)analyse how this is perceived by the person engaged in the developmental process. However, the documented need to assess and further develop educational solutions, requires case-based evidence and valid tools for studying and assessing competences and elements as tangible outcomes from these processes in order to improve possibilities for intervention within such educational settings. Whereas the current context specifically takes into consideration the issue of diversity as learning and development in multilingual and multicultural contexts, the study is of high relevance to other domains concerned with suitable set-ups and implementations of designing learning in and for diversity.

<b>Paper 18:</b>	19/11/2009	09.00 - 09.40	Room Klio
<b>Presenter:</b>	<b>Diane Yendol-Hoppey</b>		
<b>Title:</b>	<b>The Role of Practitioner Research and Social Competence in Sustaining Professional Development Schools: A Study of Simultaneous Renewal across Three PDS Networks in the United States</b>		
<b>Theme:</b>	Learning in school, the workplace and communities		

### **Research question/problem**

The keystone of Professional Development Schools (PDSs) is their role in facilitating simultaneous renewal of public school and university educators as they work side-by-side to improve teaching and learning in both organizations. Sustaining professional development schools necessitates that educators create an inquiry-oriented learning culture and the tools of collective learning which facilitate collaborative and systematic investigation into improving practice. Although PDSs offer a vehicle for this important work, the concept of simultaneous renewal lacks empirical investigation. The research questions are:

- How can professional development schools sustain themselves?
- What activities contribute to the realization of essential features of professional development schools?
- What are the barriers and facilitators to realizing simultaneous renewal within the PDS?

### **Link to the conceptual framework/literature**

PDSs assume an increasing presence across the U.S. as teacher education, supported by calls from various organizations (Holmes, 1986, 1990; NNER; AACTE), press to move towards partnership with public schools. PDSs were initiated to build a new culture of shared professional learning between schools and universities that would better meet the unique needs of today's students, teachers, and prospective teachers (Holmes, 1986; Holmes, 1990; Levine, 1992). Championed as strong and viable vehicles for both educational change and enhancing our teaching force (Goodlad, 1990), Darling-Hammond characterized PDSs as "a special case of school restructuring: as they simultaneously restructure schools and teacher education programs, they redefine teaching and learning for all members of the profession and the school community" (p. 1). Today, PDS networks have grown in number as well as configuration (Brindley, 2009) without requiring the partnership accountability necessary to realizing the goals that underpin PDS work (Yendol-Hoppey, 2009).

### **Procedure and/or instruments used to explore the question/problem**

The study explored three PDS partnerships located in three different geographic regions within the U.S. Qualitative methods drawing on an interpretivist framework were used for this study. Data gathered from each site included semi-structured interviews, field notes, participant surveys, and artifacts to investigate the ability each network demonstrated to establish simultaneous renewal as central to their work. Data analysis included both a within and across case comparative analyses. Several efforts were made to establish trustworthiness and credibility across the data collection in each context.

### **Findings/results**

This study explored the concept of simultaneous renewal across three PDS networks located in three different geographic regions in the United States. Findings indicated that the two overarching factors that significantly contributed to the success of the PDS network in reaching its goal were social competence (e.g., establishing and achieving goals, self-governance, models of communication, and collegiality) and the network's commitment to practitioner research that emphasized both boundary spanning and boundary crossing. Findings from this study also indicate that both of these factors lack conceptual clarity and thus are often implemented with intent but due to the lack of shared conceptual clarity simultaneous renewal is either marginalized or never realized.

### **Significance for educational practice and/or policy?**

Both the success and the survival of PDS programs are critical due to the important connections between the public schools and teacher education. The well intentioned work to date encourages educators to implement the PDS concept with integrity. However, the realities of the organizational system and culture of our public schools and universities are often not made public and the conflicts not resolved. By ignoring these important factors, we risk destroying yet another educational reform effort. We need to understand these factors so that we can collectively address the fundamental systemic flaws and

realities of our PDSs. Success will require digging deeper than the programmatic level to assure that stakeholders “breathe life into” the concepts that underpin the work of simultaneous renewal.

<b>Paper 19:</b>	19/11/2009	9.00 – 09.40	Room Römer
<b>Presenter:</b>	<b>Froukje Joosten</b>		
<b>Title:</b>	<b>Measuring social competence for Dutch primary education</b>		
<b>Theme:</b>	Assessment and Evaluation methods/tools		

### **Research question/problem**

Many primary school teachers in the Netherlands, experienced difficulties with the behaviour of their pupils. This problem was the starting point of a long term practice based research project, stimulated and supported by the local government in which primary schools in Rotterdam and the CED-Groep, an institute for educational research, development and advise, cooperated. The focus of the project was on the question: how can we teach social competence to all pupils in primary school? During this project we felt an increasing need to get data about the social competence of the children, first to be able to adjust the program to their needs and second to monitor the results of the education. That is the reason we developed a measuring instrument, The Social Competence Observation List (SCOL).

### **Link to the conceptual framework/literature**

Social competence is a key competence (Rychen & Salganik, 2003). It is defined as 'the capacity to act adequately in social situations' (Roede, Van Voorst van Beest & Joosten, 2005). 'Adequate' means that a balance exists in the degree in which someone looks after his own interests, while at the same time caring about the interests of others. Aspects of social competence are social knowledge, a social attitude, and social skills.

Social competence is necessary to participate in society and by participating one learns social competence (Zwaans, Ten Dam & Volman, 2006; Walraven, Oomen, Klein & Appelhof, 2006). Schools need to teach social competence and to monitor the results of this education. Therefore they need an instrument that measures social competence in such a way that it becomes possible to adjust the education to the results of the pupils (Merrell, 2001). That is why we choose to measure social behaviour.

### **Procedure and/or instruments used to explore the question/problem**

A long term practice based research in which both qualitative and quantitative research methods were used.

Group interviews with primary school teachers to learn about observable and teachable social competent behaviour in schools. Operationalisation of the definition of social competence based on literature and on the results of this interviews. Making of a pilot instrument. Expert meeting to analyze the content validity of the instrument.

The research with the SCOL involved a representative random sample of 3283 pupils attending fourteen Dutch primary schools, distributed across the country. Quantitative methods were used to substantiate the instrument and to regulate it. The internal consistency was established, as well as the test-retest reliability, and the inter-assessment reliability. In addition, the internal structure, the concept validity, the external validity and the usability were analysed. Finally, in two successive years, a semi-structured questionnaire was used to analyze the usefulness of the instrument for educational practice.

### **Findings/results**

Social competence is operationalized eight categories: Sharing experiences, Acting nicely, Playing and working together, Performing a task, Presenting yourself, Making a choice, Standing up for yourself, and Dealing with an argument.

Cronbach's  $\alpha$  of the whole scale, 26 items, was .94. Inter-assessment reliability (Spearman's rho) was .71 (28 couples; N=560). Test-retest reliability (Spearman's rho) was .76 (50 teachers, N=996).

The internal structure of the instrument consisted of three mutually dependent factors with an eigenvalue greater than 1. Social competence thus can be considered as a single concept. The construct validity and the external validity were in order as was the usability.

131 schools responded to our questionnaire about the usefulness of the SCOL for educational practice. The results show two main functions of the SCOL. Firstly teachers get a picture of the social competence of the pupils. Secondly a team gets a common framework for communication about the social

competence of pupils.

**Significance for educational practice and/or policy?**

Most people agree about the socializing task of the school. But schools find it difficult to teach it properly, i.e. by formulating goals and monitoring results. Therefore it is necessary to give them the tools - like educational methods, training, instruments for monitoring – they need to reach those goals.

We had a unique opportunity – supported by the local government - to develop together with the schools not only the content of a curriculum, but also those tools, and to combine it with research. Thus we have got a lot of experience and data about what works. It is a step forward in practice based evidence (Van Yperen & Veerman, 2008). We started in Rotterdam, but now many schools all over the country use our methods and tools.

<b>Paper 20:</b>	19/10/2009	09.00 - 09.40	Room Franken
<b>Presenter:</b>	<b>Bregje de Vries</b>		
<b>Title:</b>	<b>I see you and you see me: Effects of meeting scientists on teachers' science education</b>		
<b>Theme:</b>	Professional development - teacher(s) and training in the professions		

### **Research question/problem**

One way to help primary school teachers develop themselves into more confident teachers of science is by making them more acquainted with the domain. Therefore, we arranged meetings between domain experts and primary school teachers. The study presented followed the participating teachers' development. Its main research question was: Do expert meetings effect science education in primary schools?

Data collection focused on answering the following sub questions: (1) Do expert meetings inspire and motivate teachers to teach science? (change of attitude), (2) Do expert meetings effect the knowledge and skills of teachers to teach science? (change of knowledge and skills), and (3) Do expert meetings lead to more structurally integrated science education at the primary schools of the teachers involved? (change of practice)

### **Link to the conceptual framework/literature**

Overall, science education in primary schools is not effective enough: Too less children enter technical studies and professions, talented children are not challenged, and some groups of children (i.e. girls, children of immigrants, low-achievers) are excluded because of the way it is presented. One impediment seems to be that teachers do not feel confident in the domain. Also, many teachers are not used to didactical approaches such as learning by doing/designing, and inquiry learning whereas those seem suitable for teaching science.

Professionalizing teachers can be done in several ways, for instance by following courses. It is often argued, however, that the gap between educational theory and practice is too big, resulting in a lack of transfer of theoretical insights into practice. Therefore, the present study aimed at bringing teachers and theorists together in a conversation, expecting them to share ideas, knowledge, and skills in a more effective way.

### **Procedure and/or instruments used to explore the question/problem**

The study followed six teachers by detailed observations of five expert meetings. The teachers were interviewed, and asked to keep diaries of their school practices.

In the first phase of the data-analysis we focussed on making portraits of the participating teachers based on the interviews and observations. In the second phase of the data-analysis we aimed at making a chronological story of the meetings. In the third phase of the analysis we summarized the portraits and events in a framework consisting of the following categories: (1) change of attitude (leading to new inspiration/motivation), (2) change of knowledge and skills (leading to new teaching opportunities), and (3) change of practice (leading to structural integration of science education in the curriculum). The effect of the meetings on the teachers' development in either one of the categories was explicated if possible.

### **Findings/results**

The meetings successfully changed the teachers' attitudes. Although some teachers were already involved in science education, the meetings further inspired and motivated them. The meetings also successfully contributed to the knowledge base of the teachers, and their confidence of it. Whereas 'having enough/the right knowledge' was their main concern when we started, more complicated issues became dominant along the way, concerning how to organize knowledge (e.g., how to contact experts incidentally, how to arrange a science curriculum), and how to support the learning process (e.g., how to help children move from first questions into reasoning, how to challenge gifted and low-achieving children).

The more experienced teachers had different concerns than the novices. Novice teachers focussed on their lack of knowledge and materials, whereas experienced teachers focussed on curriculum matters and supporting reasoning thereby broadening their idea of 'science education' from teaching certain

domains to supporting curiosity and creative reasoning.

**Significance for educational practice and/or policy?**

Science education needs to be addressed in primary schools because technical studies and professions deal with a lack of students/workers. In addition, schools wish to update their curricula with more socio-constructivistic approaches by letting their children learn by doing and inquiring. Both developments are addressed in the study presented.

<b>Paper 21:</b>	19/11/2009	09.45 - 10.25	Room Erato
<b>Presenter:</b>	<b>Annemiek van der Meijden</b>		
<b>Co-presenter:</b>	<b>Rien van Stigt</b>		
<b>Title:</b>	<b>Improving students' capability of regulating their learning process</b>		
<b>Theme:</b>	Innovative teaching and/or learning methods/techniques		

### **Research question/problem**

For project oriented learning, we use a model that is aimed explicitly at answering the students' demand for developing competencies, depending on each student's role in a multidisciplinary team fulfilling a real life assignment from engineering practice. Since, previously, it was found that students find it hard to identify their individual needs with respect to development of the required competencies, possible ways of acquiring them and activities or products to demonstrate them, a workshop was introduced in which students were guided towards a simple but explicit personal development plan. Furthermore, they were handed a method for monitoring and discussing their individual competency development. Our hypothesis was that this intervention would improve students' capability to regulate their learning process.

### **Link to the conceptual framework/literature**

Van Weert & Andriessen (2005; see also Van Weert, 2006) designed a model for learning through design research, based on Checkland's (2006) Soft systems methodology. One of this method's prerequisites is that students formulate their own individual demand for competency development, i.e. a regulatory function of the learning process. De Laat et al. already stressed the importance of gradually introducing students in taking over such regulatory functions in learning from the lecturer (see also Simons et al., 2000).

### **Procedure and/or instruments used to explore the question/problem**

At the end of the project period students' appreciation of the working method as a whole and in particular the intervention and its effectiveness were obtained by means of a survey and a group discussion with the students.

### **Findings/results**

We found that the students did benefit from the intervention, although they found the format that was used for monitoring too elaborate and still reported to find it difficult to determine their level of competency development.

Students' appreciation of the method as a whole appeared to differ between groups and assignments, apparently depending on the availability of expert advice, tutoring and students' expectations.

### **Significance for educational practice and/or policy?**

In higher education real life project work is becoming a widely spread phenomenon. Although students generally appreciate this form of collaborative learning in a real context, learning outcomes do not always meet the expectations of tutors and lecturers involved. This may be caused partly by ineffective regulation of the learning process by the students. A relatively simple intervention by instruction and issue of a monitoring tool can improve students' regulatory capabilities.



<b>Paper 22:</b>	19/11/2009	09.45 - 10.25	Room Klio
<b>Presenter:</b>	<b>Jos Castelijns</b>		
<b>Co-presenter:</b>	<b>Quinta Kools, Bob Koster</b>		
<b>Title:</b>	<b>The implementation of a procedure for collective learning in a primary school in the Netherlands</b>		
<b>Theme:</b>	Learning in school, the workplace and communities		

### **Research question/problem**

Schools are challenged to continuously improve their teachers' teaching and their students' learning. In some of them, teachers collectively collect and analyze data, derive consequences from their analyses, take actions and evaluate outcomes. Such processes are referred to as collective learning (Verbiest, 2002; Dixon 2002), practice oriented inquiry or creation of knowledge (Castelijns, Koster & Vermeulen, 2009).

In the project 'Collective learning' a procedure for collective learning was developed and implemented in primary schools and institutes for teacher education. The procedure's most important features are interactiveness between participants, practical relevance, collectiveness, shared ownership and usability.

In this presentation we will focus on the conceptual framework, the design of the procedure, the way it is implemented in a school and an analysis of the results.

### **Link to the conceptual framework/literature**

The concept of collective learning refers to processes in which people collaborate to improve the common context they constitute through systematic and sustained inquiry (Castelijns, Koster & Vermeulen, 2009). Collective learning in schools implies that teachers and students are engaged in a collective process that yields collective outcomes (Simons & Ruijters, 2001). Collective learning assumes that participants not only improve aspects of their common context but also the way the process of collective learning itself (Verbiest, 2002, 2004). This double loop character makes collective learning ongoing and self-regulated. Based on the Self-Determination Theory (Deci & Ryan, 2000; 2002; 2008) a model is developed to explain why patterns of interaction between individuals and the collective they constitute can be vital and knowledge creative. Three collective psychological needs are distinguished, the need for cohesion, coherence and co-operation. These collective needs are assumed to propel collective learning.

### **Procedure and/or instruments used to explore the question/problem**

In this session we will present a case of a school that implemented the procedure. Successively, we will discuss how the school worked through the phases of the cyclic procedure: the articulation of a common ambition by the teachers with regard to the daily conversations they have with students about their work, the collection of information about students' perspectives, the interpretation of this information, the way the school derived consequences from these interpretations, which actions were taken and how both product and process were evaluated. The data are mainly qualitative: transcripts from conversations with students, reports of staff meetings, the schools innovation plan and field notes. For the analysis of these data we use the definition of collective learning (ongoing collective process, collective outcomes, double loop), student and/or teacher ownership, the phases of the cyclic procedure and the model with three collective needs as a framework.

### **Findings/results**

The case shows that by applying the procedure, the teachers successfully changed practice in their classrooms, concordant with their collective ambitions. The daily conversations were highly valued by the students. More specific, the students were positive about the support their teachers offered in these conversations. In this process, the teachers developed a collective and coherent frame of reference and strengthened their cohesion.

The teachers adapted the procedure to their own preferences. Nevertheless they seemed inclined to approach students as 'sources of information' rather than responsible actors who co-decide on the actions to be taken. Finally the teachers seemed mainly interested in the improvement of practice in their classrooms. Although they went through a double loop, they considered the improvement of the process of collective learning itself as hardly meaningful.

These findings have consequences for the further development of the procedure.

**Significance for educational practice and/or policy?**

This study is relevant for schools that aim for meaningful and sustainable educational change. It offers a procedure for a combined innovation on the micro (group) and meso (school) level of the organization, that takes the perspectives of all stakeholders into account. It facilitates a double loop collective process. It offers insight into factors that are critical for vitality in processes in which teachers and students realize common ambitions. Similar studies are carried out in teacher education institutes and in situations in which teacher education institutes and schools cooperate.

<b>Paper 23:</b>	19/11/2009	09.45 – 10.25	Room Römer
<b>Presenter:</b>	<b>Andries Koster</b>		
<b>Co-presenters:</b>	<b>Phuong-Mai Nguyen, Yvon Kooiman, Hanne ten Berge, Albert Pilot</b>		
<b>Title:</b>	<b>Study success and differential perception of the undergraduate Pharmacy teaching/learning environment by Western and non-Western ethnic students</b>		
<b>Theme:</b>	Learner Diversity and differentiation in the learning environment		

### **Research question/problem**

Traditionally the undergraduate Pharmacy programme at Utrecht University has a relatively large number of first-year students of non-Western ethnic background (38% in the academic year 2006-2007). The Department of Pharmaceutical Sciences recently redesigned the curriculum and introduced a problem- and project-based teaching/learning environment (TLE). Students from different ethnic backgrounds may perceive this TLE differently, and the possibility exists that not all students benefit from the curriculum optimally. We evaluated, therefore, how students from different backgrounds perceive several aspects of the TLE. Secondly, we measured the students' study success during the first year of the undergraduate programme.

### **Link to the conceptual framework/literature**

In educational settings with cultural diversity, the 'mosaic' model can be used to describe the TLE in which every (minority- or majority-) culture participates equally, while maintaining its cultural identity. This pluralistic vision makes the development possible of multicultural education (Banks and Banks 1995), in which differences and performances of all students are recognized, irrespective of ethnic, racial and economic background. A crucial question in this area is whether ethnic diversity should be respected as given or whether common norms should be created or even enforced. In this context it is relevant to ask whether cultural diversity is an issue. Is there a difference between students from different cultural groups in academic achievement? Are all students benefitting to an equal extent from the TLE? Is there a relationship between achievement and perception of the TLE?

### **Procedure and/or instruments used to explore the question/problem**

The students' perception of the TLE was investigated by applying a new 52-item questionnaire (Perception of Learning Environment Questionnaire, PLEQ), which measures different dimensions of the TLE on a 5-point Likert scale. The success rate (pass/fail) and the grades of passed students (scale 6-10) of eight first year courses were obtained from the administration. All data were stratified according to ethnic background of the students (groups A-F): A: North-African (Marocco, Egypt, Sudan), B: Middle-East (Iraq, Iran, Syria) and Turkey, C: Asia (Hong-Kong, China, Vietnam), D: Caribbean (Surinam, Antilles), E: Western non-Dutch, F: Dutch. Students are placed in different groups on the basis of the country, where he/she or at least one parent is born.

### **Findings/results**

Analysis of course results ( $n = 491$ ) indicated statistically significant differences in success rates. Students from group B were less successful than students from other groups in four out of eight courses ( $\chi^2$  test,  $p < 0.05$ ), and the grades of passed students of group B were lower in two out of eight courses. No other statistically significant differences between ethnic groups were found.

The questionnaire was able to measure eight dimensions of the TLE in a satisfactory way: instructor support, language problem, cooperative learning problems, cultural impact on group communication, group atmosphere, grouping preference, fairness of group grading and multicultural interest. A statistical significant difference between ethnic groups was found (MANOVA,  $p < 0.001$ ). Students of Western descent (groups E and F) perceived relatively large language problems, were less satisfied with group grading policies and were less interested in multicultural pharmacy, compared to the other groups.

### **Significance for educational practice and/or policy?**

Even though the course success rates and achieved grades of students from different ethnic groups in year 1 of the undergraduate Pharmacy curriculum are generally similar, students from different background perceive the TLE in a different way. In particular language problems, fairness of group

grading and interest in multicultural pharmacy discriminate between students of Western and non-Western origin. The results of this study indicated that an increased attention for multicultural aspects is warranted. Some suggestions will be given for the adaptation of the teaching strategies within the Department of Pharmaceutical Sciences.

<b>Paper 24:</b>	19/11/2009	09.45 - 10.25	Room Franken
<b>Presenter:</b>	<b>Ariela Gidron</b>		
<b>Title:</b>	<b>Knowing myself as other than my students – reflections on a narrative dialogue with life stories of students and their pedagogical counselors.</b>		
<b>Theme:</b>	Professional development - teacher(s) and training in the professions		

### **Research question/problem**

This paper examines the idea of getting to know one's students as other than oneself through a narrative journey into their life stories, from the perspective of a teacher educator, interested in dialogic relationships with students and colleagues.

My experience as a radical teacher educator made me wonder with Ellsworth (1989) whether I could "unproblematically 'affiliate' with the social groups my students represent, have an authentic dialogue with them or interpret their experience for them (p.130. In my doctoral thesis I took the challenge of problematising the role of the critical dialogic educator by asking: how can I, as a critical educator, get acquainted with students as other than myself?

### **Link to the conceptual framework/literature**

With a long line of educators (Dewey; Friere; Buber; Greene; Zeichner; Burbules;) I believe that dialogic relations should be the heart of the learning encounter. Dialogic relationships are not free of risk as it asks of the partners to disclose their prejudices to one another (Gadamer, 1965)

This risk-taking element is enhanced, within the structure of power relation and hierarchy built into the culture of colleges of education (Ellsworth,1989).

In order to access worlds of meaning of students and colleagues within ethical and pedagogical constraints, I conducted a narrative study based on 'virtual' dialogues of the researcher, with written texts of life stories publicly told within self-study groups of students and counselors of one first year cohort, accepting Burbules'(1993) definition of dialogue as:

"...a continuous, developmental communicative interchange through which we stand to gain a fuller apprehension of the world, ourselves, and one another" (p.8).

### **Procedure and/or instruments used to explore the question/problem**

This narrative study of life stories called for a methodology that could make up for the loss of a reciprocal face to face, ongoing dialogue with the narrators. For this purpose I developed a 3-round reading model that offered me that 'continuous, developmental communicative interchange'(Burbules, ibid) with the stories through a series of interpretive readings that took into account the text, the narrator's subtext and the reader's story as context. Within the limits of educational ethics, this narrative research indeed offered what I called 'glimpses of understanding' into personal worlds of meaning of students and counselors (Author, 2003).

### **Findings/results**

Three themes emerged as cutting across the stories - historical and chronological background ; schooling and learning; learning, career and family in early and mid adulthood, I refer to those as possible frames of reference within which the narrators could have made sense of reality and construct their personal landscapes of knowing. A critical analysis examines the role of each theme in shaping landscapes of knowing of the narrators and to identify possible shared spaces of understanding.

The deeper I went into this dialogic process of interpretive reading in an effort to understand the story of the 'other', the more I sharpened my alertness to the life story I was bringing with me, and to the 'grand narratives' that have shaped our stories within the context of the Israeli society wider historical and social context in which the stories were embedded.

### **Significance for educational practice and/or policy?**

The three-round reading model employed in this study, offers another course of action for teacher educators; a relational and intersubjective process that enables reciprocal understanding of reader and narrator through the storied text and seems to be personally safer at times. It is a process of

accumulative, interpretive rounds of readings that is left open for alternative understandings of both self and other.

While we may not be able to 'affiliate with personal worlds of meaning of others' I argue that we could extend our horizons of knowing to include our students' worlds of meaning, if we are ready to take the risk of transforming our story too in the process.

<b>Paper 25:</b>	19/11/2009	16.50 - 17.30	Room Erato
<b>Presenter:</b>	<b>Irene Hanraets</b>		
<b>Co-presenter:</b>	<b>Darco Jansen, Maarten de Laat</b>		
<b>Title:</b>	<b>Experiences of pioneers in the landscape of educational learning networks; Challenges facilitators encounter when they want to start moderating networked learning</b>		
<b>Theme:</b>	Innovative teaching and/or learning methods/techniques		

### **Research question/problem**

What are the challenges that facilitators encounter starting moderating networked learning in the domain of education and teacher professional development, and how are they dealing with these challenges? The aim of this study is to identify those challenges that seem to be specific to the domain of education and occur in the early stage of initiating, launching and facilitating networked learning.

### **Link to the conceptual framework/literature**

The educational field is increasingly considering networked learning as a promising way to stimulate and facilitate the professional development of teachers. Research shows that when one wants to start networked learning in the domain of the professional development of teachers, one has to deal with challenges that seem more or less specific for the domain of education (Barab, MaKinster & Schlecker 2003).

Research indicates that also in educational context there is a paradox between designing a network and letting a network emerge (De Laat & Lally 2004; Strijbos & Wijnberger in press; Akkerman, Petter & De Laat 2008). The results of these studies serve as a base for the underlying project.

### **Procedure and/or instruments used to explore the question/problem**

This project can be considered as an exploratory multiple case study. To explore the question eight pioneers, professionals in education (teachers, educational advisors, facilitators), were interviewed about their experiences as a facilitator in the early stage of fifteen educational learning networks.

The analysis of the content of these interviews is focused on identifying challenges that are characteristic for facilitating networked learning in the educational context. The findings are affirmed by a selection of literature on networked learning in educational context and are illustrated with personal quotes of the interviewed persons.

### **Findings/results**

The result of this exploratory multiple case study is a description of challenges that a facilitator can be confronted with in the early stage of an educational online learning network. For example: Most teachers are not yet used to exchange knowledge online. Therefore the facilitator often has to invest a lot of energy and time in making them familiar with this new way of communication. He will frequently organize a face to face meeting or will go searching for teachers who have both experience and affinity with online tools.

### **Significance for educational practice and/or policy?**

The results in this study help to get insight into a range of challenges facilitators are faced with, when initiating an educational learning network.

This study contributes to a much needed growing body of knowledge on teacher networks for professional development in the working place.

<b>Paper 26:</b>	19/11/2009	16.50 – 17.30	Room Klio
<b>Presenter:</b>	<b>Marjo van Zundert</b>		
<b>Co-presenters:</b>	<b>Dominique Sluijsmans &amp; Jeroen van Merriënboer</b>		
<b>Title:</b>	<b>The Differential Effects of Task Complexity on Domain-specific and Peer Assessment Skills</b>		
<b>Theme:</b>	Assessment and Evaluation methods/tools		

### Research question/problem

Despite the increased popularity of peer assessment in education, it is debatable whether peer assessment is readily applicable for complex tasks. We assume that peer assessment skills are first to suffer when tasks become complex, because peer assessment skills are superposed on skills related to the domain to be assessed (i.e., domain-specific skills).

The curious relation between learning domain-specific skills and learning to assess peers' performance on these skills has hardly been investigated, especially when it comes to complex tasks. Existing educational theories such as the cognitive load theory mainly focus on the instruction of domain-specific skills, but the integration with higher-order skills like peer assessment remains a challenge.

### Link to the conceptual framework/literature

The assumption that peer assessment skills suffer first when tasks become complex, can be explained by combining two theories:

(1) Learning hierarchies (Gagné, 1968) refer to the prerequisite relationship between cognitive skills. Skills below in the hierarchy enable the acquisition of skills higher in the hierarchy.

(2) According to cognitive load theory (Sweller, 1988), people have a limited working memory capacity. If tasks are complex the load on working memory (cognitive load) is high.

To perform a complex peer assessment task, students must first address their domain-specific skill, because this skill is a prerequisite for the superposed peer assessment. As the task is complex, cognitive load is high, and most of the students' working memory capacity is already being used for processing the complex domain information. Little working memory capacity will be left for conducting the peer assessment task, so the peer assessment suffers most from the high task complexity.

### Procedure and/or instruments used to explore the question/problem

In total, 110 students from secondary education received four (either simple or complex) integrated study tasks that required them to learn a domain-specific skill (identifying six research steps in a biology experiment description) combined with a peer assessment skill (how to peer assess performance on this task); two domain-specific test tasks (identify the research steps); and two peer assessment test tasks (peer assess performance). Students indicated their perceived cognitive load on a 9-point rating scale after each domain-specific task and each peer assessment task.

We adopted a mixed factorial design with the factors task complexity (simple,  $n = 51$ ; complex,  $n = 59$ ) and task type (domain-specific, peer assessment).

Performance was expressed in terms of test scores on domain-specific tasks and peer assessment tasks. A General Linear Model with repeated measures analysis was used to investigate the effects of task complexity and task type, and differences in perceived cognitive load.

### Findings/results

As expected, a significant interaction of task type and task complexity on test performance was found. For simple tasks, there is little difference in performance for domain-specific tasks ( $M = 7.80$ ,  $SD = 2.18$ ) and peer assessment tasks ( $M = 7.98$ ,  $SD = 1.84$ ), but for complex tasks, domain-specific tasks ( $M = 7.68$ ,  $SD = 2.22$ ) suffer less from an increase in complexity than peer assessment tasks ( $M = 6.86$ ,  $SD = 1.73$ ).

On perceived cognitive load, there was a significant main effect of task type. Students' perceived cognitive load for peer assessment tasks was significantly higher ( $M = 4.79$ ,  $SD = 1.29$ ) than their cognitive load for domain-specific tasks ( $M = 4.45$ ,  $SD = 1.41$ ).

### Significance for educational practice and/or policy?

Peer assessment has become increasingly popular in educational practice, because peer assessment matches with modern educational goals such as collaborative and self-directed learning. Moreover, peer assessment is a skill that is often demanded in professional life, which is another reason why peer assessment is often applied in schools nowadays.



Our results however, indicate that peer assessment is not readily applicable in case of complex tasks. Hence, it is advisable to be cautious when implementing peer assessment in learning environments with complex tasks. Methods for how to tackle peer assessment instruction for complex tasks are subject to further scrutiny.

<b>Paper 27:</b>	19/11/2009	16.50 - 17.30	Room Römer
<b>Presenter:</b>	<b>Harry Stokhof</b>		
<b>Co-presenter:</b>	<b>Birgit Ziegler</b>		
<b>Title:</b>	<b>Concept maps in question-driven learning: A tool to support the process and value its outcomes</b>		
<b>Theme:</b>	Learner Diversity and differentiation in the learning environment		

### **Research question/problem**

If teachers allow learners to inquire their own questions about a topic or domain, they feel as if they lose control about the quality of the learning process and its outcomes. Therefore, teachers are in need of a tool that helps them follow where learners are heading and what they have learned in question-driven learning arrangements.

Concept maps seem to provide both the structure and freedom wished for. In this research, the concept map was explored as a means to help teachers entering question-driven learning arrangements to (1) feel secure about their own domain knowledge and skills; (2) to support children's learning processes; and (3) to assess learning outcomes.

### **Link to the conceptual framework/literature**

Many researchers have argued that learning should start from one's own wondering (e.g., Beck, 1998; Dewey, 1910). However, teachers find it difficult to allow such freedom and diversity in question-driven learning arrangements. They feel insecure about the sufficiency of their own knowledge, and about the quality of the children's questions, learning processes, and outcomes.

Concept maps represent structure and allow for personal meaning. Therefore, they might be a suitable tool to support both the teachers and children in question-driven learning arrangements. The present study aimed at exploring the power of concept maps to support the articulation of the teachers' and children's prior knowledge of a topic or domain, and the question-driven learning processes and outcomes.

Beck, T.A. (1998). Are there any questions? One teacher's view of students and their questions in a fourth-grade classroom. *Teaching and Teacher Education*, 14(8), 871-886.

Dewey, J. (1910). *How we think*. Dover: Dover Publications.

### **Procedure and/or instruments used to explore the question/problem**

Supported by two researchers, three teachers of one primary school designed and implemented a question-driven learning arrangement in which use of a concept map was embedded. We observed and recorded the design meetings and lessons, held interviews with the teachers, collected products of the children, and ran a pre and post test.

The analysis focussed on the pre and post concept maps to get a view on if and how concept mapping had worked for the children by categorizing, among other things, the extensiveness, relatedness, and quality of the concept maps. Next, we analyzed the observations of the lessons, and the children's products, and related those data to the children's concept maps to find answers to the questions if and how the concept map had actually been used as a tool to support and control question-driven learning.

### **Findings/results**

First, the teachers felt confident about their own knowledge, and more free to let children explore their own directions. Second, the teachers and children successfully used the map to articulate prior knowledge individually and collaboratively. This led to vivid discussions in the classrooms. Third, the children used the key concepts of the map to derive new questions. The teachers could follow where they were heading, and individual explorations could be shared with the whole classroom. Finally, the map was successfully used as a tool to assess learning outcomes. The teachers were enthusiastic about testing the children in this more creative way.

The study suggests that use of a concept map in question-driven learning arrangements is fruitful. It creates a platform for knowledge construction, and provides structure and control to learners and teachers. The data also illustrate, however, that allowing freedom remained difficult.

**Significance for educational practice and/or policy?**

Trends in educational practice such as tailored education and inquiry learning indicate that teachers should be able to handle question-driven learning. However, many teachers find this difficult and wish for tools that provide structure as well as allow freedom. The present study contributes to the theory and practice of such tools.

<b>Paper 28:</b>	19/11/2009	16.50 – 17.30	Room Franken
<b>Presenter:</b>	<b>Tobias Ringeisen</b>		
<b>Co-presenters:</b>	<b>Barbara Neubach, Martin Kersting, Uta Vogelwiesche</b>		
<b>Title:</b>	<b>Self-assessment of (multi-faceted) competence increase after management training: Extended application area of the BEvaKomp</b>		
<b>Theme:</b>	Research Methods		

### **Research question/problem**

In the recent past, a number of methodological approaches have been developed to assess competence changes as an indication of management training effectiveness (cf. e.g., Erpenbeck & v. Rosenstiel, 2007). Most of the training conceptions address four competence facets, namely knowledge, methods, communication and self-management (cf. Sonntag & Schaper, 2006). The majority of assessment approaches, however, focus on process features of the trainings, capture only selected competencies and appear to be time-consuming and costly in application.

Erpenbeck, J & v. Rosenstiel, L. (Hrsg.) (2007). Handbuch Kompetenzmessung – Erkennen, verstehen und bewerten von Kompetenzen in der betrieblichen, pädagogischen und psychologischen Praxis. Stuttgart: Schäffer-Poeschel Verlag.

Sonntag, K. H. & Schaper, N. (2006). Förderung beruflicher Handlungskompetenz. In K. H. Sonntag (Hrsg.), Personalentwicklung in Organisationen (S. 230-311). Göttingen: Hogrefe.

### **Link to the conceptual framework/literature**

In response to such problems, recent assessment research suggests to capture competence increase by means of self-report (Lucas & Baird, 2006). To do so, an existing self-report instrument for university course evaluation – the “Berliner Evaluationsinstrument für selbst eingeschätzte, studentische Kompetenzen” (BEvaKomp, Braun et al., 2008) was adapted for the context of management training. By examining its psychometric properties, the suitability of the instrument was examined in the current study.

Lucas, R. E. & Baird, B. M. (2006). Global self-assessment. In M. Eid & E. Diener (Hrsg.), Handbook of multimethod measurement in psychology (S. 29-42). Washington, DC: American Psychological Association.

Braun, E., Gusy, B., Leidner, B. & Hannover, B. (2008). Kompetenzorientierte Lehrevaluation – Das Berliner Evaluationsinstrument für selbsteingeschätzte, studentische Kompetenzen (BEvaKomp). Diagnostica, 54 (1), 30-42.

### **Procedure and/or instruments used to explore the question/problem**

Out of the six BEvaKomp-subscales, the four above-mentioned (i.e., knowledge, methods, communication and self-management) were selected. By means of expert judgment with consensus finding, item wordings were slightly modified. Items with low face validity were omitted and newly created ones were added to make-up a total of 18 items. After completion of a communication management training, these adapted BEvaKomp scales were administered to a sample of 450 management executives of a German Administration.

### **Findings/results**

Confirmatory factor analysis and scale analysis indicated high construct validity with homogeneous subscales. Correlation patterns with external criteria suggested sufficient discriminant and convergent validity of the adapted instrument within the context of management training.

### **Significance for educational practice and/or policy?**

Based on the Bologna Process, research and practice in education have addressed multiple approaches to evaluate competence changes from primary to tertiary education. However, adult learners and professional education have largely been neglected in this process. There is great need to focus on this group, since the need for life-long learning and European efforts to harmonize vocational training make it necessary to assess competence changes regularly in later adulthood and across a number of competence domains. To address these needs, the BEvaKomp was adapted as an easy-to-administer

instrument which enables assessment of competence change in multiple domains especially in the context of professional training.

<b>Paper 29:</b>	20/11/2009	9.00 – 09.40	Room Erato
<b>Presenter:</b>	<b>Jonathan Kasler</b>		
<b>Co-presenter:</b>	<b>Meirav Hen</b>		
<b>Title:</b>	<b>Enhancing Emotional Self-Efficacy as the Missing Piece in SEL implementation</b>		
<b>Theme:</b>	Professional development - teacher(s) and training in the professions		

### **Research question/problem**

This paper presents a qualitative study of a school in transition. Intensive efforts to foster SEL in a small elementary school in northern Israel encountered serious obstacles with changes of personnel. Core members of staff attempted to maintain key principles of SEL in the face of serious opposition from the new leadership. While these teachers succeeded in reaffirming the school's vision of SEL, the experience of transition revealed a previously unseen weakness. Though most staff members shared the commitment to SEL, they seemed unable to fully understand and implement it. This study addresses the identification of factors that served to sustain but also hampered institutionalization of the SEL program.

### **Link to the conceptual framework/literature**

The study follows the struggle of key staff, or “enforcers” (Huberman, 1984), to maintain a school vision of social emotional learning in the face of diverse challenges. This vision embodied the promotion of SEL skills among the children attending the school with a focus on self-awareness, social awareness, self-management, relationship skills, and decision-making skills (Frederick, 2003). There is considerable evidence that research-based SEL programs can positively affect both academic and social outcomes for children (Elias, 2006).

The school adopted a learning-by-experience model (McLaughlin & Mitra, 2001). The results of this approach are considered in the light of literature dealing with sustainability of SEL programs in schools (Elias, Zins, Graczyk, & Weisberg, 2003).

### **Procedure and/or instruments used to explore the question/problem**

Semi-structured interviews of all staff members were conducted in order to explore their commitment, identification, and understanding of SEL principles. All interviews were taped, transcribed, and translated from Hebrew to English. Constant comparison analysis was employed to elicit salient themes that emerged from the interviews. This method, which seeks issues, events, and ideas that are repeated by significant numbers of respondents, is considered appropriate for triangulation in identifying underlying themes (Leech & Onwuegbuzie, 2007). Inductive analysis was employed to elicit the underlying themes from the data rather than imposing predetermined categories (Dye, Schatz, Rosenberg & Coleman 2000). This seemed to best serve the spirit of the study, as we were primarily interested in the feelings and opinions of staff members.

### **Findings/results**

The findings reveal that the school had adopted a learning-by-experience model (McLaughlin & Mitra, 2001), which created almost immediate and highly visible results “on the ground.” An initial explosion of creative SEL programming brought about significant short-term rewards. However, while core teachers remained committed to the SEL vision, and demonstrated an understanding of SEL, other members of staff did not. Consequently, a picture of a confused school, displaying a worrying and increasing gap between its vision and day-to-day practice, emerged. The principal searched for a way to save the SEL vision from eventual demise.

### **Significance for educational practice and/or policy?**

Studies relating to teacher competencies contribute to wise decision making regarding allocation of resources and priority setting. Due attention to the social and emotional needs teachers is essential for creating effective learning environments. If these needs are not properly met long term strategies of improving educational outcomes may not be realized. This study provides an insight into the dilemmas facing schools where staff often need to cope with staff turnover and in particular changes in management. The results of the research suggest the need for a major investment in the social and emotional competencies of teachers in order to fully meet SEL programming goals and to sustain gains over time. A model for addressing these needs will be presented as the missing piece in enhancing social emotional learning in schools.

<b>Paper 30:</b>	20/11/2009	9.00 – 09.40	Room Klio
<b>Presenter:</b>	<b>Janneke Hooijer</b>		
<b>Title:</b>	<b>Student communities of practice and teacher participation</b>		
<b>Theme:</b>	Innovative teaching and/or learning methods/techniques		

### **Research question/problem**

The main focus of this study is to understand how students can learn together in Communities of Practice (CoP) and what factors influence the success of such an educational design. The central research question is;

What factors make student communities in higher education successful?

As such this is a practice-based research project where organisational and social aspects of student communities of practice are studied in order to have an insight in the simulating and hindering factors of this type of educational design, with a specific focus on the role of the teacher in this field.

### **Link to the conceptual framework/literature**

Cooperative or collaborative learning has proven to be effective in educational settings. (Kimble, Hildreth & Bourdon, 2008). The theory of social constructivism states that the acquisition of knowledge is a process of knowledge construction. Social interactions with fellow students, teachers and others contribute to the construction of knowledge (Loyens & Gijbels, 2008).

In this research project the social constructivist views on learning are translated into an educational environment where students and teachers learn in communities of practice. The conceptual framework of Communities of Practice as developed by Wenger (1998) is used as a basis. Specifically the dimensions of practice (mutual engagement, joint enterprise, shared repertoire) were guiding for the set-up and analysis of the research. The three dimensions of practice were used to group the factors that influence the success of student communities of practice.

### **Procedure and/or instruments used to explore the question/problem**

This research population consisted of students and teachers within an undergraduate programme of communication and media design of the Noordelijke Hogeschool Leeuwarden in the Netherlands. The research project consisted of two stages. In the first stage, interviews were held with several teachers. Teachers were asked what they experienced to be successful aspects of the student communities, as well as what problems they encounter. Relevant contextual documents from the organisation, describing the policies and strategies of the educational programs, were analysed.

The results of these interviews and the document analysis formed the basis for two questionnaires. In the second stage, these questionnaires were designed in parallel, one for students and one for teachers. These were then distributed among all students and teachers participating in the communities.

### **Findings/results**

We identified several aspects that made learning and working in a CoP successful and other aspects that made learning and working more difficult. Success factors were mainly identified in the dimension of mutual engagement. Both students and teachers indicated that the social aspect of learning is very important. Both felt enabled to share their knowledge and passion in the community.

Difficulties were indicated regarding the role of the teacher in the community. Teachers were seen as part of the community by both students and teachers. However, there was disagreement on the extent in which teachers were expected to actively guide the students. Another critical issue is the size of a community. In order to get a sense of belonging, students and teachers indicate that a community should not be too large, a maximum of 40 participants is regarded as optimal. Currently, communities can have up to 100 participants.

### **Significance for educational practice and/or policy?**

Student CoP's are an effective way of creating a social constructivist educational environment. It enables students to learn collaboratively in a natural setting. However, before this practice is implemented in large scale innovations, it is important to know more about the conditions that make this learning successful.

This research gives more insight in the successful and problematic aspects of implementing this educational environment in higher education.

<b>Paper 31:</b>	20/11/2009	9.00 - 09.40	Room Römer
<b>Presenter:</b>	<b>Mart van Dinther</b>		
<b>Title:</b>	<b>Factors affecting students' self-efficacy in education</b>		
<b>Theme:</b>	Learning in school, the workplace and communities		

### **Research question/problem**

Researchers in educational settings are drawing growing attention to the role of students' thoughts and beliefs during learning. Self-efficacy, as a key element of social cognitive theory, appears to be a significant variable, because it affects students' motivation and learning. The content of this submission forms part of a doctoral research project in which we investigate the main research question: what is the relation between student perceptions of a competence-based learning environment (including assessment) and student self-efficacy? For that purpose we investigated theoretical and empirical literature about the role of students' self-efficacy in education and summarized research conducted on the effects of self-efficacy on motivation and learning. In this submission we focus on the (sub) research question: which identified factors within educational settings affect the self-efficacy of students?

### **Link to the conceptual framework/literature**

In the theoretical framework of our doctoral research project we combine, research concerning the role of student perceptions and assessment in relation to students' learning and achievement with the results of research about the mediating and predicting role of self-efficacy in relation to student learning and achievement. In this submission we focus on self-efficacy, as a key element of social cognitive theory (Pajares, 1996; Schunk, 1995, 1996). Social cognitive theory views human functioning in a transactional way, depending on reciprocal interactions between one's behaviors, internal personal factors (e.g., thoughts and beliefs), and environmental events (Bandura, 1986, 1997).

### **Procedure and/or instruments used to explore the question/problem**

To give an answer on our research question we summarized different primary theoretical and empirical studies. From the perspective of the diversity of studies, this type of review is a narrative one.

Before searching the literature we determined the criteria for inclusion: 1)level of the study had to be higher education, 2)the variable 'self-efficacy' had to be an operationalization of the original Bandura construct, 3)research or theory about factors influencing self-efficacy had to be described, 4)theoretical and empirical documents were both included, 5)publications after 1980 were used. Several relevant databases were searched online from 1980 up to the present. The keywords 'self-efficacy' and 'higher education' were combined. However, finding few studies within that level, we broadened our search to all educational levels. Out of the hits we selected the studies that met our criteria for inclusion. Than we searched further by means of the 'snowball-method'.

### **Findings/results**

The results of our narrative review reveal several factors that influence students' self-efficacy. In case of higher education there is empirical evidence for the personal factor 'gender' and the environmental factors 'modeling, feedback, self-monitoring/self-evaluation and real-life learning environment' affecting students' self-efficacy.

### **Significance for educational practice and/or policy?**

Higher education institutions which focus on competence-based education put effort in helping their students developing the required knowledge, skills and competences, by means of modifying their education programs. Although competent behaviour largely depends on acquiring knowledge and skills, researchers in academic settings are focusing increasingly on the role of students' self-efficacy and student perceptions during learning. Self-efficacy is a promising perspective for educational practice because researchers have established that self-efficacy plays a predicting and mediating role in relation to learning and achievement (Bandura, 1997; Pajares, 1996; Schunk, 1995). The results of our self-efficacy research, including factors affecting students' self-efficacy, combined with research concerning student perceptions and assessment, can contribute to our understanding of learning processes and can be of use for educational institutes who want to moderate their educational programs.



<b>Paper 32:</b>	20/11/2009	9.00 – 09.40	Room Franken
<b>Presenter:</b>	<b>Gabriela Kugler</b>		
<b>Co-presenter:</b>	<b>Birgit Ziegler</b>		
<b>Title:</b>	<b>Fostering reading competence in vocational education with an adapted concept of reciprocal teaching</b>		
<b>Theme:</b>	Research Methods		

### **Research question/problem**

Aim of the study is to obtain the effects of the renowned concept of Reciprocal Teaching (RT) by Palincsar and Brown (1984) in a different context. Good reading competence is one of the key factors to a successful vocational training. Many of the students in vocational education who are slow learners yet lack basic reading competence and need fostering. There are many methodological concepts to foster reading competence but very little is known about the efficiency of the methods and about problems in implementation (Baumert et al. 2001). An empirical study is carried out to clarify some of the aspects which concern its efficiency and implementation. RT is to be transferred and adapted to fit the classroom context of German vocational schools with its heterogenic range of comprehenders.

### **Link to the conceptual framework/literature**

In PISA 2000 great fostering need was established on reading competence of German students. Studies in the section of vocational education confirmed that these shortcomings are also apparent there (Efing 2006, Lehmann et al. 2006, Gschwendtner/Ziegler 2006a and 2006b). Additional studies show that reading competence is linked not only to how learners acquire mathematic competence (Baumert et al. 2001; Lehmann et al. 2006) but professional knowledge as well, e.g. in the engineering sector (Nickolaus/ Gschwendtner/ Geissel 2008). The RT concept (Palincsar/ Brown 1984) aims to improve comprehension by fostering and monitoring the reading process. It is based upon findings on characteristics of good readers. They consider reading meaningful, activate their prior knowledge on a topic, plan and monitor their reading process continually (Brown/Campione 1990). As in cognitive apprenticeship learners are directly instructed and the support decreases gradually; the same terminology is used.

### **Procedure and/or instruments used to explore the question/problem**

The teachers who implemented the concept in their classes were introduced to the conceptual framework. They got a thorough training on the adapted concept with special focus on individual requirements of their classes. Following RT, learners were introduced to four strategies in succession: activating relevant background knowledge, clarify unknown terms, posing questions on the text and summarizing. Departing from RT, predicting was left to choice and an additional practice phase before the start of the reciprocal phase was introduced. Before the start of the intervention, the pupils were tested on their level of reading competence (GatesMacGinitie 7-9, 2000), their reading fluency (LGVT) and their knowledge on reading strategies (WLST). During the implementation of the strategies classroom observations were videotaped and each teacher got feedback. Several other tests (motivation: Prenzel; IQ: CTF 20R; Question formation and summarizing: self-developed; repetitions of tests) to monitor students' levels and development were carried out.

### **Findings/results**

So far the reading competence of the sample as a group of poor readers is confirmed. Some results on the development of the students in the course of the training might be present by the end of November. Probably by the start of next year findings according to the results of the follow-up tests may be stated.

### **Significance for educational practice and/or policy?**

Quite some classroom teaching relies on good reading competence of learners.

Teachers who work with texts may find that their students have not yet the abilities to follow such teaching. It is necessary to have reliable results on the effectiveness of methods on fostering reading competence and information on their implementation for those teachers who need to decide which steps to take in order to advance their students. This study aims not only at informing interested parties on results but also wants to provide teachers with tried and tested material. Teachers who take part in the study state e.g. that the structure of RT gives a reliable frame students are thankful for. Teachers express widened possibilities to create stimulating learning environments because of newly gained knowledge about their students.

<b>Paper 33:</b>	20/11/2009	09.45 - 10.25	Room Erato
<b>Presenter:</b>	Miriam Goes-Daniels		
<b>Title:</b>	<b>From facilitation to self-governing learning networks: What are the factors that influence the continuation of a learning network?</b>		
<b>Theme:</b>	Professional development - teacher(s) and training in the professions		

### **Research question/problem**

The stimulation by means of subsidy from the Government for the learning network Consortium vmbo-mbo Stimuleringsinitiatief ends in September 2009. Still the participants wish to continue this learning network. We performed an evaluation study on what factors from the participants' perspective make a learning network effective so it can be self supporting.

### **Link to the conceptual framework/literature**

This presentation is primarily a practice-based descriptive study exploring participants' activity in this particular learning network. Little is known about peoples motivation for participation, competencies required for networked learning and aspirations to continue a network. Analysing what the driving factors are for a network to continue to exist is the main goal of this descriptive study. Implications for the development of theory on networked learning will be discussed.

A learning network can be seen as a "community of practice". Wenger (1998) shows how this concept has turned out to provide a useful perspective on knowing and learning. A growing number of people and organizations in various sectors are focusing on networks as a key to improve their performance.

### **Procedure and/or instruments used to explore the question/problem**

The research was done in two stages. In the first stage, interviews were held with several participants of the learning network. For example they were asked how cooperation in the network has been, which sticking points they detected and how they have solved them, what kind of results were produced and how the learning network itself functioned. Relevant documents describing the policies and strategies of the projects that are part of the learning network are also studied in this phase to contextualise the interview data.

The results of these interviews and the document analysis were the basis for a questionnaire. In the second stage, this questionnaire is distributed among all known participants in the learning network Consortium vmbo-mbo Stimuleringsinitiatief. The aim of the questionnaire is to validate and scale the findings of the first stage.

### **Findings/results**

- The results of the interviews give us a notion about the failure and success factors of the learning network. Most of the participants wish to continue the learning network but they also indicate the fact that they have very little time to participate and when there is no more stimulation on time and money they foresee the network to fade away in the daily business. Therefore, some covering organisation or sponsorship will be necessary. Also, they indicated that they exchanged their knowledge and developed materials with each other within the network and that helped them to their professionalization.
- The questionnaires are distributed the end of June and we will receive the results in August/September. The analysis will be done in the fall of 2009 and the results will be included in the presentation.

### **Significance for educational practice and/or policy?**

In this learning network it was important that teachers of preparatory secondary vocational education schools and teachers from vocational education schools cooperated to design vertical continuity learning pathways (enabling smooth transition from lower to higher education) in the education of health care and social welfare.

Central in this learning network for the participants was learning from and with each other and exchange the results and the good practices from their projects.

<b>Paper 34:</b>	20/11/2009	09.45 - 10.25	Room Klio
<b>Presenter:</b>	Liza Lee		
<b>Title:</b>	<b>A Case Study on Integrating Soundbeam Technology and Music Activities to Enhance a Special Needs Child's Development of Motor Skills and Attention Span</b>		
<b>Theme:</b>	Innovative teaching and/or learning methods/techniques		

### **Research question/problem**

The purposes of the study are 1. Integrating Soundbeam technology and music activities to assist a young special needs child's development of motor skills. 2. Integrating Soundbeam technology and music activities to enhance a young special needs child's attention span. The specific research questions asked are:

1. Could Soundbeam technology and music activities assist a young special needs child's development of motor skills?
2. Could Soundbeam technology and music activities enhance a young special needs child's attention span?

### **Link to the conceptual framework/literature**

Soundbeam is shown to help in the instruction of special needs children. It can help expression through music and sound, and encourages participation in activities (Swingler, 2003; Ellis, 2006).

Soundbeam lets the user create sound and music without contact with any equipment (Soundbeam Project, 2003). The use of Soundbeam has helped to develop practical movement and expressive movement capabilities, as well as allowing children to create improvised music (Ellis, 1996).

Soundbeam is drawing in those who had no access to music or music therapy, and is also benefiting therapists through the quantitative data it produces (Hunt, Kirt, & Abbotson, 2000).

### **Procedure and/or instruments used to explore the question/problem**

The methodology of the study used a quantitative analysis and a qualitative study.

The results were interpreted based on data collected via a semi-structured musical activities observation form, interviews with parents, musical activities feedback form, and researcher's activity log. Cross-comparison was conducted on the quantified data and related original documents to increase the objectivity and reliability of the research results.

The assessment instruments included pre-test and post-test forms completed by a physical therapist at a local hospital, semi-structured observation forms to gather data on motor skills and attention span from four observers who were trained graduate students, interview reports from the parents at home and teaching logs from the researcher. All intervention sessions were recorded on video and these were viewed and scored by four observers. At the end of the study, three social reliability assessment reports were completed by the parents and an observer.

### **Findings/results**

The results showed the efficacy of using Soundbeam and music activities on developing the young child's motor skills and attention span, especially while using the visual software and Soundbeam equipment together, the subject became more interested in movements. After attending 10-week research teaching, the subject's gross motor made progress, such as: was able to hop on one foot ;catch the ball from 3m and move her body to do it when she needed. After attending 10-week research teaching, the subject's fine motor made progress, such as: was able to use the eraser without destroying the pieces of paper. After 10-week music teaching, the subject's attention had made a remarkable improvement on both of her reading and school work. It was proven by the parents and the school teacher. Therefore, the research teaching has a positive result for the subject's gross motor skills, fine motor skills and attention span.

### **Significance for educational practice and/or policy?**

Soundbeam technology is a brand new avenue for educators in the field of special education and therapists in Taiwan. According to the literature review and the study both showed the positive results for young special needs children; therefore, it is crucial to show the results to the educators in the field of special education and apply this technology for all special needs children.

<b>Paper 35:</b>	20/11/2009	09.45 - 10.25	Room Römer
<b>Presenter:</b>	<b>Robert Schlack</b>		
<b>Co-presenter:</b>	<b>Heike Hoelling, Franz Petermann</b>		
<b>Title:</b>	<b>Protective factors in children and adolescents bullying or being bullied: do they buffer risk factors? An approach on the basis of the large German wide representative KiGGS sample</b>		
<b>Theme:</b>	Learning in school, the workplace and communities		

### **Research question/problem**

Protective factors in children and adolescents are discussed to contribute to a well-adjusted psychosocial development in the presence of risk factors. They describe developmental potentials and strengths in contrast to deficits and risks of an individual. From several longitudinal studies the impact on mental health problems of protective factors related to the individual and its environment, such as self efficacy, optimism, and sense of coherence, family cohesion, or social support from friends/adults is known. Less known however is whether there is a compensatory effect of protective factors in children and adolescents for the chance to be a bully/perpetrator, a victim or a bully/victim in the face of risk heightening factors. The present contribution aims to investigate which factors can buffer the risks to take one of the bully-victim roles.

### **Link to the conceptual framework/literature**

The paper presents an empirical contribution to the discussion about the role of protective factors for the role-taking as a bully/perpetrator, victim or a bully/victim. Petermann & Schmidt (2006, 2009) suggest a classification of resources that differentiates between the role of resources in individuals with healthy and under pathogen conditions. According to this proposal protective factors can either have preventive or compensatory effects in the presence of pathogens (risk factors). The submission refers to this conceptual framework asking which factors heighten the risk to be a bully, victim, or bully/victim and if -in the presence of these risk factors- factors addressed as potentially protective can buffer these effects.

### **Literature:**

Petermann, F.& Schmidt M.H. (2006) Ressourcen - ein Grundbegriff der Entwicklungspsychologie und Entwicklungspsychopathologie? Kindheit und Entwicklung, 15, 118-127.

Petermann, F.& Schmidt M.H. (2006) Ressourcenorientierte Diagnostik - eine Leerformel oder nützliche Perspektive? Kindheit und Entwicklung, 18, 49-56.

### **Procedure and/or instruments used to explore the question/problem**

6619 participants from 11 to 17 years and their parents who took part in the German wide representative KiGGS study answered a self-administered questionnaire assessing experiences of violence as a bully/perpetrator or a victim and questions about their attitudes towards instrumental and expressive violence. Information about family cohesion, social support, personal resources, and type of school was gathered from the children and adolescents as well. Information about psychosocial risk factors, such as growing up with a single parent, growing up with a number of siblings, early parenting (mother younger than 18 years at the day of giving birth), unemployment, low school education, or lack of vocational education of at least one parent was drawn from the parents' questionnaire. With multinomial regression analyses effects of risk and protective factors were examined separately and simultaneously. Customised and theoretically derived hypotheses were tested by specifying contrasts and slicing interactions for explanatory variables.

### **Findings/results**

Risk factors for being a bully/victim were male sex, younger age, instrumental and expressive attitudes towards violence, growing up with a single parent. Risk factors for being a bully were male sex, instrumental and expressive attitudes towards violence, and visiting 'Hauptschule'. Migrants did not have an increased risk to be a bully. Regarding the bully role risk factors were not buffered. Boys were more likely to be victimised than girls. For sex and gender effects, lower than expected odds ratios were obtained from the combined model for the victim role, which suggests a non-additive compensatory effect. The simultaneous investigation of risk and protective factors revealed protective effects of the family situation, while social risk factors concerning an individual's environment, such as type of school, parental unemployment, or lack of vocational education (parent), were hardly affected

by protective factors. The family cohesion scale showed moderate protective effects for all bully/victim roles.

**Significance for educational practice and/or policy?**

Bullying is of chief importance for school climate and learning environment. Victims frequently suffer from emotional problems, loose interest and decline in their academic achievements. But also the bully/perpetrators do not escape the consequences of their aggressive and dissocial behaviour. They display an increased risk for depression, low levels of empathy, and relational problems. Bully/victims however show the most striking behaviour up to psychopathological relevance. It is the aim of this contribution to investigate which of the selected protective factors may have a buffering effect on common risk factors. Results may give hints for starting points for resource based prevention and intervention strategies.

<b>Paper 36:</b>	20/11/2009	09.45 - 10.25	Room Franken
<b>Presenter:</b>	Jantine van Beek		
<b>Co-presenter:</b>	Frank de Jong		
<b>Title:</b>	<b>A questionnaire to determine the 'teacher-' and the 'student centred-' teacher in pre-vocational education.</b>		
<b>Theme:</b>	Research Methods		

### **Research question/problem**

The research is part of the Phd-study. This research is addressed to the differences in teacher-student interaction. Two prototypes of teachers are identified: teacher and student centred teachers. For these oppositional prototypes of a teaching continuum is chosen because they represent the educational transform from knowledge transfer oriented towards capacity directed education. But how to find such teachers? In that context we started with developing a diagnostic questionnaire in order to determine these two types of teachers. Research shows that teachers over or underestimate themselves in self assessment referring to these prototypes. Students can better judge in how they experience their teachers. Therefore the question is: Can a diagnostic questionnaire be developed to determine these two types from the perspective of a student?

### **Link to the conceptual framework/literature**

Besides the teacher responsibility in "capacity directed education", students are also becoming responsible for their own learning. Their active involvement in learning is addressed. Therefore students have to be competent in regulating their own and their collaborative learning. Teachers have to deal with the transfer of knowledge, cognitive skills, and with the development of affective and the regulative skills (Vermunt, 1992). These so called metacognitive skills are important if students have to take over responsibilities in learning (de Jong, 1992). The teacher-student interaction might be a crucial factor in the 'learning-to-learn' theses metacognitive skills. Hypothesized is that the teacher centred teacher pays mainly attention to the cognitive skills. The student centred teacher also pays attention to the affective and regulative skills. To inquire the hypothesis we first have to determine these prototypes. The construction of the questionnaire is based on the related questionnaires of Meirink (2007) and Brok (2001).

### **Procedure and/or instruments used to explore the question/problem**

Departure is the questionnaires 'student perceptions of teacher behaviour' (Meirink) and 'teaching activities' (Brok, 2001). Subscales of the two questionnaires are selected in relation to the teacher centred and student centred prototypes.

Some characteristics addressed in the questionnaire are: cognitive transfer, affective and regulative activities, external and internal regulated. Other examples are construction, cooperative learning, reproduction and individual learning.

These items are examined in a study with N=40 prevocational students. They filled in the questionnaires about two of their teachers. These teachers are selected on basis of classroom observations and opinions of the colleagues and team leader. The teachers stand respectively for prototypes of a teacher and student centred teacher. Some group interview sessions with students are held in order to find out if all terms were understood or how they interpreted some questions in order to have a concept validation of the questions.

### **Findings/results**

The central question is whether the questionnaire distinguishes the teacher and the student centred teacher. The development of the questionnaire started with the above written pilot-study. We decided to analyze the scores of the different questionnaires; the scales from the "Brok-questionnaire" and the "Meirink-questionnaire". At that way we have as much students as items we have. The basis of these analyses were the difference-scores; what patterns can we see in these scores? The results of factor-analyses at the both questionnaires are very preliminary, but the first results indicate that according to the scores we can distinguish 4 factors. At this moment we are trying to rename the factors and applied research must prove if the "new" factors can be reformed to reliable scales. At the conference more results will be available: Beta and reliability statics of the scales as well as meaningful interpretations. Definitive questionnaire will be presented.

### **Significance for educational practice and/or policy?**

In this research the one to one interaction between the teacher and the student is the central theme. The goal of this research is to improve the competences of teachers e.g. their interactions with the students in prevocational education. The selected teachers are monitored for a longer time; e.g. they are recorded in the classroom.

The interaction is analyzed and there will be diagnosed which “genre” of language (Lockhorst, 2003) is used. So we will research whether the student centred teacher uses a different type of language than the teacher centred teacher. In this research we will pay attention to the results of the students in relation to the type of interaction. Results and insights are valuable for instance for video interaction coaching in teacher education.

<b>Paper 37:</b>	20/11/2009	10.50 – 11.30	Room Erato
<b>Presenter:</b>	<b>Frank de Jong</b>		
<b>Co-presenter:</b>	<b>Lia Spreeuwenberg, Bert Rijkenen, Hanneke de Laat</b>		
<b>Title:</b>	<b>Knowledge Building in a Master Learning and Innovating for teachers in vocational Education</b>		
<b>Theme:</b>	Professional development - teacher(s) and training in the professions		

### **Research question/problem**

The problem concerns the professionalization of teacher who can be leading in innovations in their school. This on bases of a well developed knowledge base and research skills. The general question is if a knowledge building approach is adequate to professionalize teachers at a master level to become leading innovators in their school.

The questions are:

- 1) Is it possible to design a knowledge building Master curriculum and achieve the acknowledgement?
- 2) Do Master students get involved in Knowledge building processes?

### **Link to the conceptual framework/literature**

Schools are confronted with reforms and innovations like constructivists approached, e-learning, competence or capacity developing curricula, assessment etc. However these 'paper reforms' are seldom total realized at the level of the classroom. And opportunities of improving the educational praxis are missed. Educational management explicated a need for teacher who can be more leading in reform praxis by having a better knowledge base and research skills to guide and contribute to the change processes.

In the design of the master learning and innovating the challenge was to embed a didactic that support the professionalization of these tomorrow creators and innovators. This not only connects to the discussion between constructivism and direct instruction (Tobias and Duffy, 2009), but especially to approach of knowledge building (Bereiter, 2002) and knowledge building principles (Scardamalia, 2002). Also the relation between doing, learning and understanding in the knowledge creation process (de Jong, 2006) is relevant.

### **Procedure and/or instruments used to explore the question/problem**

In the design process field research was done by meetings with potential students, school principles, educational researchers in the vocational education in order to determine the needs and needed competence as teacher innovators in vocational schools. Also literature research was done on teacher competence and potential adequate didactics.

In a next phase competence where worked out in a knowledge base and the didactical principles where transformed in curriculum design. First results of this iterative design process was validated with the field. The whole curriculum description and didactical approach was examined by the National accreditation board and acknowledged.

To support students' knowledge building process students work in research communities of praxis (Wenger, 1998) and knowledge building communities (Bylaczyc & Collins, 1999). In these communities students make us of Knowledge Forum (Scardamalia, 2002). Database logs and socio analytic tools are used to determine the group process and students' knowledge building process.

### **Findings/results**

The results are:

- an acknowledged Master (Master of Education) curriculum on learning and innovation for the vocational education by the National accreditation board.
- A knowledge building Master curriculum
- First results of the knowledge building process of the Master students during the first two months.
  - o Sociogram analysis, cohesion of the group, centrality of the teacher
  - o Amount of participation by students contributions, references, rise above's, readings etc.
  - o The conceptual growth embedded in the contributions

The third mentioned results will be available at time of the conference. At the moment we can say that during the start of the Master which was in combination with the ATEE-conference and the IKIT knowledge building Summer Institute (Mallorca, Las Palmas, aug-sept 2009) the students' knowledge building and the group process is amazing. Comparison will be made between students who participated at the ATEE/summer institute (N=16) and students who did not (N=6).



**Significance for educational practice and/or policy?**

In the Netherlands 8 Educational Master programs on Learning and Innovation will be accessible for teacher who want to professionalize themselves as educational innovators. This professional development on Master level is important for the development of the teachers who can be leading in the improvement of the educational praxis. On the other hand Universities will be skeptical of this more professional than academic oriented master programs. It therefore is important to evaluated the didactical approaches on levels of process and outcomes in order to prove the adequacy and to have progression in the praxis of these master programs.

<b>Paper 38:</b>	20/11/2009	10.50 – 11.30	Room Klio
<b>Presenter:</b>	<b>Markku Suni</b>		
<b>Co-presenter:</b>	<b>Petri Suni</b>		
<b>Title:</b>	<b>A Question of Balance in Practice Enterprise</b>		
<b>Theme:</b>	Innovative teaching and/or learning methods/techniques		

### **Research question/problem**

Practice Enterprise education as practiced in Turku University of Applied Science is based on a multidisciplinary and multicultural group of students together founding a company and then running it together. They are supposed to learn by doing and do everything themselves with the teacher tutor only as a facilitator and perhaps consultant in some matters. On the beginning, however, when the group is still in forming state and the different roles are unclear the group must be lead by the tutor somewhat in order to get things started. Thereafter the students should begin to work on their own as a group and the teacher should let go. The question is one of balance: at which time should the teacher stop leading the group and which way to give in.

### **Link to the conceptual framework/literature**

Many texts are available about group work and how to manage group. Very little is readily available about this kind of balance, especially with multicultural group. Some students are more willing to take responsibility rather early during the course while many expect the teacher to guide them. We have had to try and follow very carefully how the group reacts - perhaps by loosening and again tightening the grip. Each teacher learns by doing.

### **Procedure and/or instruments used to explore the question/problem**

The amount of success can be seen in how the group functions later on during the year. For instance, when designing their fair stand for the PE fair. It is very difficult to predict in advance how quickly the group begins to be capable of working on their own and this calls for very delicate balance and self-control in the behaviour of the teacher. The exact balance varies with the group and is difficult to predict. Even more difficult it is to advice the teachers in this respect beforehand. A problem with new teachers.

### **Findings/results**

In general our groups have been capable of growing to the extent of being able to design, plan, and run their business on their own. The amount of time varies and has been subject to some thinking. During the years we have tried different amounts of time allowed for the group to learn to know themselves and grow. We now favor somewhat longer period than before.

### **Significance for educational practice and/or policy?**

European societies are becoming multicultural and so are our schools as well, along with the whole education system. Handling different multicultural aspects has been a source of many problems and topic for many studies. Our experiences and findings are among those - maybe rather practical as this is directed towards entrepreneurship education.

<b>Paper 39:</b>	20/11/2009	10.50 - 11.30	Room Römer
<b>Presenter:</b>	<b>Ursula Lucas</b>		
<b>Co-presenter:</b>	<b>Phaik Leng Tan</b>		
<b>Title:</b>	<b>The development of a reflective capacity: moving towards 'self-authorship'?</b>		
<b>Theme:</b>	Learning in school, the workplace and communities		

### **Research question/problem**

The aim of the project is to investigate the development of reflective capacity during work-based placement learning and its relationship to student final-year academic performance.

The research objectives are to investigate: 1) the nature of the reflective capacity brought by business studies and accounting undergraduates to their work-based placement (internship) or their final-year studies; 2) the elements within the work-based placement that support, encourage or inhibit the development of a reflective capacity; and 3) how the reflective capacity brought by undergraduates from their work-based placement is related to their academic performance in their final year of undergraduate study.

### **Link to the conceptual framework/literature**

The project is specifically interested in the relationship between 'social competences' and 'cognitive development'. However, it uses the term 'reflective capacity' to embrace both of these aspects. It draws on a body of research (particularly that of Baxter Magolda, 1992) concerned with the identification of key intellectual and personal changes undergone by students as they progress through higher education and enter into employment. This research finds that students' capacity to reflect and exercise judgment is related to their way of knowing. Baxter Magolda identifies four qualitatively different ways of knowing that comprise three mutually constitutive and confirming elements:

- cognitive (how one makes meaning of knowledge)
- interpersonal (how one views oneself in relation to others)
- intrapersonal (how one perceives one's sense of identity).

Baxter Magolda, M. (1992). *Knowing and Reasoning in College: gender related patterns in students' intellectual development* San Francisco: Jossey-Bass

### **Procedure and/or instruments used to explore the question/problem**

Research on students' ways of knowing is concerned with how students make meaning of their experience, and how this is related to the way they approach their learning. This requires careful listening to what students have to say about their experience and the suspension of judgment to empathise with, and subsequently describe, that experience. The aim is to allow the student's own frame of reference to emerge. This project therefore falls into the naturalistic area of enquiry and implies a certain type of research method: the semi-structured extended interview with in-depth analysis. A total of 32 semi-structured interviews (approximately one hour each) were conducted with placement students (n=11) at the commencement and in the latter stages of their work-based placements, and with final-year students (n=6) who had previously completed a placement.

### **Findings/results**

Absolute and transitional ways of knowing, which are not supportive of a reflective capacity, were predominant. However, the context in which the research was conducted (UK, new university, vocational subject) possesses features that appear to have a significant impact on the way in which ways of knowing are manifested. These features relate to the motivation for studying and a strong focus on study organisation and assessment. The placement provides a context within which students: develop interpersonally, through a range of changing relationships with others and develop intrapersonally, through a changing sense of self. This seems to arise because students have to take responsibility for their own learning and performance. The relative improvement in academic performance achieved by placement students in their final year seems to arise from a developing sense of self (greater intrapersonal contribution) that leads to a more focused application towards their learning rather than from cognitive development.

### **Significance for educational practice and/or policy?**

The findings support a better understanding of students' ways of knowing and the importance of context. By appreciating how development is required on three fronts (cognitive, inter- and

intrapersonal) the educator can design a more informed pedagogy. This will draw on Baxter Magolda's constructive-developmental pedagogy that involves: validating the student as a knower, situating learning in the student's own experience and viewing learning as 'mutually constructing meaning'. Within this framework we propose a pedagogy that rests on the following principles: the student takes central responsibility for their own learning, learning involves an enquiry into the nature and role of knowledge within business and also into practice (that of the student, work colleagues and educators). However, this is a shared enterprise with the educator, who also engages in reflective enquiry.

<b>Paper 40:</b>	20/11/2009	10.50 - 11.30	Room Franken
<b>Presenter:</b>	<b>Qiaoyan He</b>		
<b>Co-presenters:</b>	<b>Martin Valcke, Antonia Aelterman</b>		
<b>Title:</b>	<b>Developing the Scales on Evaluation beliefs of Student Teachers</b>		
<b>Theme:</b>	Assessment and Evaluation methods/tools		

### **Research question/problem**

In context of the educational background of globe curriculum reform, borrowing both methodological approach and perspective from recent research on belief, teacher beliefs, this paper attempted to explore an instrument with 52 items named Evaluation Beliefs of Student Teachers (EBST) to make clear the evaluation beliefs, which existed in the student teachers' mind about teaching and learning. As such, we sought to (a) identify the factors by two solution that predict a general student teacher's beliefs about evaluation for teaching and learning, (b) determine and refine whether scales are reliable and validable for its factor structure.

### **Link to the conceptual framework/literature**

In order to validate five dimensions in recent trends about evaluation and develop an instrument in view of assessing beliefs of teachers about assessment, the review of literature section includes theories of beliefs, teachers beliefs, teacher beliefs about evaluation that provide rudimentary underpinnings and contribute to designing research procedure and interpreting the results of the resent study.

### **Procedure and/or instruments used to explore the question/problem**

In order to identify a number of latent factors of Student-teacher Evaluation beliefs, we split the stratified random sample into half( $n=223$ ) and half( $n=223$ ). Both of the sub-samples were used to carry out Exploratory Factor Analyses(EFA) and Confirmatory Factor Analyses(CFA) respectively to determine how and what extent the observed variables are linked to their underlying factors, and at the same time we elected to remove some items for further analysis which couldn't cater to the suitable condition——strong factor loadings ( $>.40$ ) . As such, we can test and compare the results of both approaches to verify our factor structure and hypothesis.

### **Findings/results**

For our data, the stability of the two-factor model revealed that the hypothesized model may not be entirely adequate with model fit results[ ( $df$ ) = 897;  $p<.001$ ],  $GFI=0.872$ ,  $CFI=0.882$ ,  $TLI=0.872$ ,  $RMSEA=0.060$  with a 90% interval of 0.016 and 0.093].

The stability of the five-factor model of the EBST performed modest model fit results[  $=1475.318(p<.001)$ ,  $GFI=0.839$ ,  $CFI=0.826$ ,  $TLI=0.811$ ,  $RMSEA=0.062$  with a 90% interval of 0.047 and 0.156

The modified model with five factors performed some better model fit results[  $=1088.024$  ( $p<.001$ ),  $GFI=0.872$ ,  $CFI=0.882$ ,  $TLI=0.871$ ,  $RMSEA=0.053$  with a 90% interval of 0.032 and 0.125].

### **Significance for educational practice and/or policy?**

Taken into account the shortcomings in prior research, the purpose of the present study is to develop and provide some initial validation evidence for an instrument that could measure student teacher's beliefs about evaluation related to teacher centered and students centered teaching and learning for promoting their progress through a teacher education program and preparing their teaching careers.

<b>Paper 41:</b>	20/11/2009	11.35 – 12.15	Room Erato
<b>Presenter:</b>	<b>Teresa Gonçalves</b>		
<b>Co-presenters:</b>	<b>Nair Azevedo, Mariana Alves, Joana Campos, Maria do Céu Roldão</b>		
<b>Title:</b>	<b>Teachers' identity, role, knowledge and professional practice: an inquiry to the Portuguese case</b>		
<b>Theme:</b>	Professional development - teacher(s) and training in the professions		

### **Research question/problem**

There is a deficit of extensive research about teachers and their profiles in educational research in Portugal. The aim of our study is to contribute for the characterization of these professionals by collecting and analyzing data which may allow us to define some profile, taking into account the different educational contexts and levels. We will analyze different dimensions of teaching as a professional practice: the nature of teaching, the construction of professional knowledge and the existing conditions for the professional practice. The following questions guide our work: Who are the teachers working in Portuguese Schools? ; How do they see their role and professional practice? What do they think they know and need to know? What are the characteristics of their professional practice?

### **Link to the conceptual framework/literature**

The study of teachers as a social category has been approached from different perspectives (neo-Marxist, functionalist and phenomenological). All of them failed to give an account of the teaching profession in all its complexity. We need to approach teaching considering professional identity as a process in permanent configuration and reconfiguration (Davis, Sumara & Luce-Kapler, 2008; Nieto, 2006). The considerable changes in teaching conditions brought by globalization (Blasé, 1982) and all the changes involved in the European educational policies which try to adapt the educational systems and the teaching activity to the emerging needs and challenges existing within this context demand a better knowledge of the teachers working in our schools. We need to analyze the values, feelings, knowledge and practices which characterize their activity, which depend on the structure and the recognized functionality of the occupation, as well as on the meanings that teachers attribute to their own work.

### **Procedure and/or instruments used to explore the question/problem**

We approach our research questions by combining an interpretative-qualitative approach with a quantitative analysis of the collected data. The qualitative analysis will allow us to define reference theories and concepts and different analysis levels. The quantitative approach will serve the extensive characterization of a representative number of teachers in different educational contexts and levels.

We created a questionnaire covering the different dimensions of the study defined above which will be applied to a sample of teachers working in different educational levels and institutions (public and private). We asked about their representations about the teacher's role, the construction of teacher's identity and professional knowledge, as well as the existing conditions for teaching, in order to define professional profiles in the Portuguese context. We will analyze the collected data and triangulate the different variables present in our study in order to define the a Portuguese teachers' profile.

### **Findings/results**

From the application of this questionnaire we hope to define a profile of the Portuguese teachers working in different educational levels, institutions and contexts. Considering the growing homogenization of the European space of education and formation, as well as the labor open market existing in Europe, with the consequent free circulation of professionals in all domains, there is evidence for the need of these studies as well as the comparison between the different European countries at this level. We are now finishing the questionnaire, afterwards we will make a pre-test and finally we will apply it during 2010. We expect to have some results by the end of 2010.

### **Significance for educational practice and/or policy?**

Policy concerning teaching, teacher education and the educational systems reform must be informed by a thorough understanding of the identity, practice, knowledge and needs of the teachers working in our schools. If we want the teachers to become implicated actors within the transformation of educational systems we need to know their profile as well as their own understanding about their professional activity and their role as educational agents. Our study aims at contributing for a better understanding of the profile of the teachers working in Portugal. The findings may allow us to propose continuing

formation programs adapted to the profiles and needs of the Portuguese teachers. It may also inform policy makers about the educational background, professional experience and practice of the teachers in Portugal.

<b>Paper 42:</b>	20/11/2009	11.35 – 12.15	Room Klio
<b>Presenter:</b>	<b>Marleen Lauwers</b>		
<b>Title:</b>	<b>Adapt collaborative learning to a flexible and interactive( computer bases) learning environment through the use of ' Belbin roles'</b>		
<b>Theme:</b>	Innovative teaching and/or learning methods/techniques		

### **Research question/problem**

Collaborative learning is a form of active learning where students learn by working together with other students on a group assignment.

Since the decree on Flexible learning came into force in Belgium on 30th April 2004, there has been an increase in the number of individual education paths which has led to a much wider range of levels of attainment within the incoming student population. This means that the organisation no longer works with fixed groups. Because of this the organisation can't fall back on the traditional group division. If we want to computerize (1) collaborative learning then we must find a way to measure competences such as communication (Communicator) and cooperation (Collaborator) in a digital interactive learning environment.

### **Link to the conceptual framework/literature**

We are also continually looking for ways to prevent students from hitchhiking within the collaborative learning environment. Hitchhiking in this context means when the student deliberately adds nothing or next to nothing to the group assignment but can take advantage of the group product.

(1°) Timmers,S., Valcke, M (2008) The impact of computer supported collaborative learning on internship outcomes of pharmacy students *Interactive Learning Environments*, 16 (2) 131-141

(2) How to Belbin team roles from World Wide Web: <http://www.belbin.com/>:

### **Procedure and/or instruments used to explore the question/problem**

First year Bachelor of Midwifery students at the University College Arteveldehogeschool Ghent (B), systematically learn to collaborate. We use the Belbin team roles model (2). This model identifies and explains why some people work together better than others. The students were asked to complete the 'Belbin Self-Perception Inventory' test. This allows the student to identify what team role is most suitable for him/ her.

During the sessions of cooperative learning, either interactive or face to face, students are assigned a specific Belbin role which he or she has to use in a correct way at a correct time during the communication process.

The qualitative value of this teaching method for students and supervisors was investigated, through two interviews with student focus groups (N=30) and one with all supervisors ( N=12).

### **Findings/results**

Through the use of Belbin roles students become aware of different team roles. The influence on the dynamics of the group was judged as positive by the students and the teachers. The quality of the debate improves during the face to face as well as the on-line sessions. By being assigned a team role and having to act within that role, the problem of hitchhiking is countered. This in turn makes the assessment of the competences such communication and collaboration more transparent.



<b>Paper 43:</b>	20/11/2009	11.35 – 12.15	Room Franken
<b>Presenter:</b>	<b>Sabine Digel</b>		
<b>Co-presenters:</b>	<b>Josef Schrader, Ralf Olleck, Stefanie Hartz</b>		
<b>Title:</b>	<b>Professionalization of Teachers and Trainers in Adult Education by Using Video-based Cases</b>		
<b>Theme:</b>	Research Methods		

### **Research question/problem**

In the discussion in educational science, case-based learning is considered to have great potential as regards the professionalization of teachers. It is expected to foster analytic and problem-solving competencies and other higher-level cognitive competencies related to reflection, and to provide a realistic picture of the complexity of learning and instruction (Merseeth, 1999; Schrader & Hartz, 2003). The widespread esteem of the case study method and the variety of the existing approaches contrast with the lack of systematic research on the particular conditions, processes and effects of its use.

Therefore, the goal of this study is to examine how teacher expertise can be promoted by using video-case-based learning as a means for the professional development of the teacher and trainers in the adult education field.

### **Link to the conceptual framework/literature**

Professional performance of teachers is closely related to the competency to perceive and analyze situations of learning and instruction: It can be characterized by one's ability to adopt multiple perspectives on single issues (Nittel, 2000) as well as "to make adequate use of a broad, scientifically sound and thus in many ways abstracted knowledge in concrete situations, or vice versa: to recognize in such situations which elements from the pool of knowledge might be relevant" (Tietgens, 1988, p. 37).

Following these aspects we examine the promotion of teacher expertise in terms of a "competency to diagnose pedagogical situations": (1) the ability to depict pedagogical situations, (2) the ability to take on different perspectives, and (3) the ability to systematically apply conceptual knowledge in the analysis of instructional situations. These dimensions can be seen as central criteria to focus on for improving the professional performance of teachers.

### **Procedure and/or instruments used to explore the question/problem**

The studies are carried out as part of a further education training program for adult educators representing the whole adult education field. The training program has the same procedure for all conditions. The training program is subdivided into three stages. Four training days are required. During the training, the participants will analyze 5 cases in individual work as well as in group work. Therefore selected every-day educational processes are video-taped. The cases used are authentic, routine classroom situations that ensure contextualization and a nearness to actual practice, but are not previously known to the learners. The 10-15 minutes lasting case sequences are integrated into a computer-supported learning environment and complemented by instructional support in the form of hyperlinks to theoretical concepts as well as to authentic perspectives of actors (teachers and learners), which allow participants to interpret the cases with reference to the relevant issues.

### **Findings/results**

The results that will be presented on the conference are based on 7 training programs with about 10-15 participants each (N=77), altogether adult educators and trainers but with different professional qualifications and acting in different fields.

The data will include findings on expectations and acceptance of the learning with cases, results concerning the development of the competency to diagnose pedagogical situations during the training program, and evaluations on the analyzing processes during the group work on the cases.

It is based on the evaluation of the written case analyses, standardized questionnaires and tests.

### **Significance for educational practice and/or policy?**

With the growing demands on the quality of adult education there is also an increase in the demands on the training of teachers. According to the findings of empirical research on learning and teaching, the quality of training becomes a question of the quality of teaching rather than of the organizational

framework that the current concepts of quality management focus on. Currently, in adult education in Germany there is no comprehensive concept for the qualification of teachers and trainers, and the existing training programs have found only little resonance: They often focus purely on knowledge transfer and neglect the fact that teachers already gained specific experience and knowledge in teaching and training that should be taken up and developed further (Wirtschafts- und Sozialfond, 2005).

<b>Paper 44:</b>	20/11/2009	12.20 – 13.00	Room Erato
<b>Presenter:</b>	<b>Wieland Wermke</b>		
<b>Title:</b>	<b>Teachers' Professional Development Culture and the Influence of the School System A German Swedish Comparison</b>		
<b>Theme:</b>	Professional development - teacher(s) and training in the professions		

### **Research question/problem**

This Paper deals with two questions: (i) which knowledge sources teacher regard to be important for their professional development, and (ii) how school governance affect teachers' professional development. (i) All knowledge sources are actors in the school system, which aim to form the role of the school and the teachers. For this reason it is very interesting to investigate which knowledge sources teachers prefer for their professional development.

### **Link to the conceptual framework/literature**

The conditions under which teachers work, however, differ: e.g., sociocultural characteristics, school forms or subjects, teacher's education as well as school governance affect the profession of teaching. Still, a distinguishable occupational culture of teachers exists (Feiman-Nemser & Floden, 1991; Lortie, 1975). This culture is mainly based on the particularities of teaching heterogeneous groups and is particularly dependent on organizational frame factors on the school level (school climate and school faculty) (Hoy et al., 1996; Hoy & Sabo, 1997) and school system level (school governance structures) (Berg, 1993; Berg, 2000; Broadfoot et al., 1993). Considering a common occupational culture also a common professional development culture of teachers is assumed. Professional development means systematic knowledge acquisition, which is directed towards the development of the teaching profession, i.e. the reflection and change of professional practice, in particular instruction methods.

### **Procedure and/or instruments used to explore the question/problem**

Based on 33 interviews a questionnaire for a quantitative survey has been developed. The professional development culture of teachers is to be understood as a summary of what they do for their professional development (practices) and what opinion they of different aspects of professional development (beliefs, perceptions). The sample contains 192 teachers in 16 schools in the province of Stockholm/Sweden, and 215 teachers in 13 schools in Berlin/Germany.

### **Findings/results**

The Data show that a broader professional development definition is more appropriate to show what teachers do for their development. They have certain attitudes toward knowledge sources, and they act as agents in their professional development. They choose certain offers and reject others.

Furthermore the idea of a professional development culture seems appropriate to describe the relations between teachers professional development attitudes and practices and the influence of the school system.

Important differences occur between both countries, when it comes to the openness of teachers towards influence of knowledge sources, which are regarded as actors, from outside the school. Swedish teachers are much more open than their German colleagues in general but especially toward universities and institutions for school steering.

### **Significance for educational practice and/or policy?**

A perspective like this can show how teachers are agents of their own professional development. It can illustrate what influences and affects teachers' work and to what extent in general teachers are open to ideas and reform. Here no established research exists.

Understanding how and why different school systems determine teachers' professional development culture can yield awareness of how and why certain ideas of change and professional development are successful.

<b>Paper 45:</b>	20/11/2009	12.20 – 13.00	Room Klio
<b>Presenter:</b>	<b>Tamara Szafranski</b>		
<b>Title:</b>	<b>Bridging the Gap: Education, Popular Culture, and Technology</b>		
<b>Theme:</b>	Innovative teaching and/or learning methods/techniques		

### **Research question/problem**

My paper encapsulates my research into sociocultural theory and applies it to contemporary student experience; exploring how, we, as instructors, can help our students to critically assess their own engagement with modern popular culture and technology: an increasingly important community of self-identification and shared knowledge outside the university. To facilitate discussion, I will additionally highlight suggested assignments that I have utilized in my own classrooms successfully, and will discuss the principles behind them. As may be ascertained, the essence of my work is not concerned with providing support for any singular theory; but rather, addressing the importance of providing practical applications of existing theories as a way to create meaning for students outside the classroom environment, as well as to enrich their experience within it.

### **Link to the conceptual framework/literature**

Research into Vygotskian theory, particularly the work of Moll and Greenberg, has led me to see connections between my current doctoral project at University College Cork, which concerns the practical exploration of theories of gender beyond the classroom environment, and the larger framework of external, relevant communities of shared knowledge and learning across disciplines and educational levels. My doctoral project, which proposes the creation of a pedagogical model that emphasizes greater relevancy between conceptual theory and "lived" experience and practice; as well as my research for this paper into the importance of assisting students to develop critical assessment of their own engagement with contemporary culture and technology, are firmly rooted in my fourteen years working as an Instructor in English and Women's Studies in the United States (currently teaching at the University of Southern Maine).

### **Procedure and/or instruments used to explore the question/problem**

To provide greater focus for the research presented in the paper, I will highlight suggested assignments that I have successfully utilized in my own classrooms; in addition, I have outlined the theoretical principles behind the creation and execution of each assignment, as well as the practical guidelines for effective utilization within the classroom. These assignments are meant to function as prompts for exploration and discussion, not as forced material for classroom application; in other words, the assignments are merely intended to provide examples of practical application of key theoretical concepts.

### **Findings/results**

This is part of an on-going study into student transfer and the promotion of pedagogical practices and models that assist students in making connections between classroom content and external experience and practice; as such, it is closely linked with my doctoral work, which I am currently conducting. That said, I hope to have compiled significant results by the end of next year. I would additionally note that my research is merely adding to the extensive research which has been done on Vygotskian principles and student transfer; however it moves that research into a new avenue of exploration; notably, the idea that popular culture and technology are now significant communities of shared knowledge and self-identification for students, and as such, must be properly considered and addressed, particularly at the post-secondary (university) level.

### **Significance for educational practice and/or policy?**

Absolutely; my work is not only based on research, but on practical experience as an educator. While the course, the content, and the material may change and be different for every classroom, the importance of creating a tangible resonance for the student outside of an academic setting is an imperative; particularly in the increasingly diverse and complex work and social environments into which they will be entering upon leaving the university. My project aims to help students to enter the larger world of external culture outside the academy, not as pure intellectuals who are separated from it, but as self-critical, self-reflective parts of it.

<b>Workshop 1:</b>	18/11/2009	15.35 - 17.05	Room Erato
<b>Presenter:</b>	<b>Rajni Kumrai</b>		
<b>Co-presenter:</b>	<b>Jane Hoy</b>		
<b>Title:</b>	<b>Using participative theatre as a dynamic tool in social action learning to address issues of inequality and oppression.</b>		
<b>Theme:</b>	Innovative teaching and/or learning methods/techniques		

### **Definition of the question/problem that you address in your workshop**

This workshop explores the extent to which creative teaching methodologies of action-learning using participatory theatre-based approaches, can be used as effective tools for professional based learning. Drawing on Boal's Forum theatre, participative theatre can be used as a means of engaging with groups and communities especially those experiencing exclusion and marginalisation. This workshop extends thinking about the use of theatre approaches across a range of professions which energise and enable creative solutions to work-based situations. Based on a recent Practice Based Professional Learning research project involving two UK Higher Education Institutions, this workshop draws on experiences and reflections of youth and community students. It invites participants to take part in this form of dynamic learning using the learning tools of sociometry, gamesercises, sculpting and forum-type scenarios. Through reviewing the learning resources emanating from this project it also considers its adaptability to teaching practice in a range of professional sectors.

### **(New) (research) methods and/or instruments/tools used to resolve question/problem**

The project "Using action-learning in the professional development of work-based practitioners" employed a number of innovative tools to investigate how participatory theatre approaches can be used to complement and augment teaching and learning strategies in practice-based learning environments. The new research methodology comprised of two day-long experiential workshops using participatory theatre approaches delivered to two groups of youth and community students. The workshops provided hands-on experience of inter-active learning drawing on themes of team/group work, leadership and management to complement students' teaching programme and enable students to explore new ways of responding to challenging work-based situations. Reflection-in-action interviews during the workshops took place using handheld recording devices followed by semi-structured telephone interviews with one cohort of students and a small number of line managers and face-to-face interviews with HE staff. Follow-up focus groups with both groups of students took place leading to an analysis of findings based on data collection.

### **Significance for educational practice and/or policy?**

Historically, workplace learning has been seen as a place of belonging to a 'community of practice' . More recent perspectives have considered the significance of how biography and prior experience facilitate the inter-relationships between employees and their workplace environments. Participative theatre has a key role in shaping future educational policies which address social inclusion, diversity and equality. It has the potential of enabling professions to become more effective by working through day today experiences faced by workers, volunteers and communities. The results of this research have the potential of offering training agencies a dynamic instrument to add to their teaching and learning toolbox. The in-service training of youth and community workers could also benefit from such a tool as could workers, volunteers and managers working in related professional sectors.

### **Why should participants attend?**

This workshop approach is based on the research project which explored nontraditional and non conventional approaches to action learning and used a range of participant-based research methodologies. The workshop draws on Boal's theatre work and uses the tools of forum theatre as an innovative way for participants to gain a dynamic understanding and fresh insights into applying social learning in educational and professional based learning environments. The active nature of the workshop enables a high level of social interaction and the collective group experience will maximise opportunities for participants to engage in this learning experience. There will be opportunities for practitioners to consider the different learning materials from this project in relation to their own practice thus furthering their own professional development.

<b>Workshop 2:</b>	18/11/2009	15.35 - 17.05	Room Klio
<b>Presenter:</b>	<b>Jörg Holle</b>		
<b>Co-presenter:</b>	<b>Michaela Brohm</b>		
<b>Title:</b>	<b>Value-based education in schools</b>		
<b>Theme:</b>	Learning in school, the workplace and communities		

### **Definition of the question/problem that you address in your workshop**

Schools are obliged to convey social competences by law. In a recent study (Brohm 2009) the applicable laws on an international and national level have been examined with focus to social competences. The education-centred laws of the Human Rights Conventions of the United Nations and the European Union, the national and regional rights of European regions (analysed here as an example the German Grundgesetz and the Landesgesetze) presented eight basic goals that schools have to apply:

1. Acceptance and respect of human rights with emphasis on: Human dignity, tolerance of other nations, races and religions, ban of discrimination on social, political grounds, or concerning sexual orientation, equal rights for genders
2. Awareness of democracy and democratic behaviour
3. Peace education
4. Sustainability education
5. Development of personality and skills
6. Social coherence and cooperation, willingness to behave in a social way
7. Employability (incl. achievement and cooperative motivation, life-long learning skills)
8. Factual knowledge and skills

These goals are hardly attainable without social competence.

### **(New) (research) methods and/or instruments/tools used to resolve question/problem**

The various texts of law have been studied with the focus of a relation to education. Therefore we researched the Human Rights Conventions of the United Nations and the European Union, the national and regional rights of European regions (analysed here as an example the German Grundgesetz and the Landesgesetze). We reduced the laws to their value-orientated cores.

### **Significance for educational practice and/or policy?**

Values are closely linked to teaching (social) competences: by establishing a certain set of values and morals at schools it is possible to affect students and to enable them to learn from and through these values.

### **Why should participants attend?**

We are certain that this is the first time that educational laws, values and social competences are being linked in literature and in practice.

<b>Workshop 3:</b>	18/11/2009	15.35-17.05	Room Römer
<b>Presenter:</b>	<b>Anita Blonk</b>		
<b>Co-presenter:</b>	<b>Jose Wichers-Bots</b>		
<b>Title:</b>	<b>Designing a School Information Leaflet Gathering and Analyzing Individual Educational and Pedagogical Goals</b>		
<b>Theme:</b>	Professional development - teacher(s) and training in the professions		

### **Definition of the question/problem that you address in your workshop**

In the Netherlands, a strong increase in student behavior problems has led to more schools for special education and a greater demand for individual support. Individual education plans have to be made for every student with problems. If we are looking at these plans, we see a lot of educational and pedagogical goals which are more or less SMART formulated, but there are often more than 10 goals per student. Still, goal realization is low, it's too much work. Reduction of the quantity of the goals is not enough; quality must go up and a teacher needs to have more common shared goals and shared leaflets in the whole school to be effective in his own classroom.

### **(New) (research) methods and/or instruments/tools used to resolve the question/problem**

The School Information Leaflet (SIL) is a practical, school specific supplement to the school plan. It is a set of school wide recognized goals and proved effective interventions.

SIL is developed within schools who are dealing with behavior problems. A first step for implementation was reducing the amount of goals for an individual student: a maximum of one goal per student. This goal had to be formulated as SMART as possible. Goals which were identified for more than one student, were described as class goals and if there were more classes with the same class goal, then it was described as a school goal. Also the steps to achieve the goal were in detail described. After three months an evaluation was made. The goals which were useful for the whole school and the proved effective steps were placed in the SIL and were learned throughout the whole school.

### **Significance for educational practice and/or policy?**

The School Wide Positive Behavior Support (SWPBS) movement for schools (founders Universities of Connecticut (Prof. dr. George Sugai) and Oregon (Prof. dr. Rob Horner) appears to have major significance for preventing social problems and learning social competencies. SWPBS emphasis on primary prevention (e.g., a school-wide shared culture and language, taught to all students) in behavior issues instead of dealing with students with behavior problems at the so-called tertiary level (e.g., individual diagnosis and treatment) is promising. But the question for our research for implementing SWPBS in The Netherlands is: How can we convince schools to do more on the primary level and to reduce the workload on the tertiary level (which is nowadays the case.).

### **Why should participants attend?**

In corporation with school teams the idea of The School Information Leaflet is developed. It is based on the questions and doubts of teachers who want to deal more effectively with all kind of behavior issues in their class room but they found that writing extensive treatment plans is not the solution.

The idea of building up a School Information Leaflet that fits your school population and is based on data from your own school, makes sense for a lot of teachers who are struggling with behavior issues. In our workshop we will work with participants on a demo-set of formulated goals and steps to show that it is worthwhile to evaluate plans in the school regularly on effectiveness and to learn from results as a team.

<b>Workshop 4:</b>	19/11/2009	13.30 – 15.00	Room Erato
<b>Presenter:</b>	<b>Frank de Jong</b>		
<b>Co-presenter:</b>	<b>Lia Spreeuwenberg</b>		
<b>Title:</b>	<b>Getting Started with Knowledge Building Creation: workshop for beginners</b>		
<b>Theme:</b>	Innovative teaching and/or learning methods/techniques		

#### **Definition of the question/problem that you address in your workshop**

The Knowledge Building Community model of Marlene Scardamalia and Carl Bereiter has a long history in research on learning and teaching with educational technology. The main drivers for such a model are found in advances in social-constructivist theories of learning and teaching, the move toward a “global village” requiring multicultural collaborations involving multiple perspectives, and the need to empower people to flexibly learn and innovate in the Knowledge Age.

#### **(New) (research) methods and/or instruments/tools used to resolve the question/problem**

The vision of classrooms based on the Knowledge Building Community model centers on students building collective knowledge with “fidelity to the ways work with ideas is carried out in the real world” (Scardamalia, 2002, p. 6). This vision represents a shift from traditional views of education to “idea-centered education” where problems are found in authentic attempts to understand the world and ideas are treated as objects of inquiry that can be tinkered with, combined with other knowledge objects, and improved upon. Knowledge building brings ideas to life in the public domain, making them available for use, challenge, synthesis with other ideas, and progressive refinement.

The model is also embodied in Knowledge Forum, a technology-based tool that supports the construction of a communal multimedia knowledge base.

#### **Significance for educational practice and/or policy?**

Education is in searching how to educate people to the competence needed to contribute to the problems we are confronted now a days. Knowledge artefacts are not seen as ‘how the things are’ but more in a way scientist work with knowledge as a state of the art of our knowing. Artefacts that can be inquired, build on and modified in order to contribute to our collective knowing.

Learning as believing is the knowledge that is transferred is not reaching the current demands anymore. Knowledge creation offers an alternative way for learning it contributes to educate students to being knowledge competent.

#### **Why should participants attend?**

This workshop is itself run as participation in a knowledge building community --- allowing for deep understanding of the underlying design principles, learning theories, and teaching strategies of the Knowledge Building Community model. Participants will work with cases drawn from a variety of primary to university-level classroom settings and will work hands-on with Knowledge Forum in order to work together to advance their understanding of problems such as:

- How should learning and knowledge be conceptualized in a knowledge building classroom?
- Since we do not work from a “blank slate” --- how can designers and teachers support a shift from more traditional approaches to teaching and learning to a knowledge building approach?
- What roles do teachers play? What roles do students play?
- How do we assess student learning and knowledge advancement?



<b>Workshop 5:</b>	19/11/2009	13.30 – 15.00	Room Klio
<b>Presenter:</b>	<b>Maarten de Laat</b>		
<b>Co-presenter:</b>	<b>Darco Jansen, Monique Korenhof</b>		
<b>Title:</b>	<b>Tools to facilitate networked learning</b>		
<b>Theme:</b>	Learning in school, the workplace and communities		

#### **Definition of the question/problem that you address in your workshop**

The central question we would like to focus on during this workshop is: How to build and facilitate networked learning in order to stimulate professional development.

This workshop will be inspired by the keynote - A networked learning perspective on professional development. The keynote addresses current issues and ongoing research on networked learning. The workshop should be seen as a more practical continuation during which we would like to share our experiences with facilitating teacher networks for professional development and discuss its use in day to day practice.

#### **(New) (research) methods and/or instruments/tools used to resolve question/problem**

At our institute - Ruud de Moor Centrum, at the Open University of the Netherlands - we have developed and implemented a set of tools to facilitate networked learning. The main focus of this workshop is to explore and experience how these tools can contribute to the development and cultivation of networked learning.

#### **Significance for educational practice and/or policy?**

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#### **Why should the participants attend?**

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<b>Workshop 6:</b>	19/11/2009	13.30 – 15.00	Room Römer
<b>Presenter:</b>	<b>Michaela Brohm</b>		
<b>Co-presenter:</b>	<b>Sabine Schmidthermes, Anna Katharina Hein</b>		
<b>Title:</b>	<b>Initiating an International Large Scale Assessment for Social Competencies</b>		
<b>Theme:</b>	Learner Diversity and differentiation in the learning environment		

### **Definition of the question/problem that you address in your workshop**

Due to the gap between the high importance of improving social competencies and the lack of a students large scale assessment on an international level on that matter, we would like to initiate such an international study. We pursue the question, if there are differences concerning the level of social competencies of students in an international comparison. Taking into consideration the problems that can occur such as validity of the translated questionnaires, comparability between the countries and cultural differences of social competencies. During the workshop we want to start such an outstanding project.

### **(New) (research) methods and/or instruments/tools used to resolve question/problem**

We choose a very open modality of exchange of thoughts during the workshop: We would like to initiate a short form of Open Space in which the participants bring their own questions and topics into the process. The results of divergent working processes will be collected at the end of the workshop. The goal of such a method is to initiate a vision that we can transfer into research action.

### **Significance for educational practice and/or policy?**

If the large scale social competence assessment indicates any differences in the developed level of social competencies the following step would be to analyse and compare the different curricula and to find out, how effective they are under different circumstances of various nations and school systems. The impact on research is larger the more nations participate in the study, because the project benefits from different intercultural experiences in developing social competencies.

### **Why should participants attend?**

This workshop is highly original, because it intends to create an extraordinary innovative research project. Every participant of this conference who is interested to enter a network on this international large scale assessment on social competencies is invited to join the workshop.

<b>Workshop 7:</b>	18/11/2009	13.30 – 15.00	Room Franken
<b>Presenter:</b>	<b>Lynn McAlpine</b>		
<b>Title:</b>	<b>Zones of teacher thinking in relation to action: A tool for analyzing one's knowledge about teaching and learning</b>		
<b>Theme:</b>	Professional development - teacher(s) and training in the professions		

#### **Definition of the question/problem that you address in your workshop**

There is considerable discussion in the teaching literature about the relationship between teacher thinking and action. We have developed a model of reflection on teaching (McAlpine & Weston, 2000) and a model of zones of thinking related to teacher action (McAlpine et al, 2006 a); McAlpine et al, 2006 b). The four zones range from abstract beliefs through strategic thinking about relationships among instructional elements to tactical thinking, the procedures to operationalize strategic thinking, to concrete in-the-moment thinking during teaching. The shift from conceptual through to in-the-moment thinking represents decisions increasingly embedded in a particular teaching context. More recently, we have evidence that the zones can be useful in thinking about knowledge related to learning (Gonsalves et al, 2009). While the research was conducted in post-secondary teaching contexts, we feel the zones of thinking are relevant to teaching and teachers generally.

#### **(New) (research) methods and/or instruments/tools used to resolve question/problem**

The zones of thinking provide a novel analytic framework for considering the kinds of decisions that lead to teaching actions and the kinds of knowledge about learning that may inform these actions. As such, they offer a tool for reflecting on one's own teaching in the support of learning.

#### **Significance for educational practice and/or policy?**

The framework has been used in a number of different workshops internationally and participants have found it a useful tool and reflecting on their teaching practice.

#### **Why should participants attend?**

This is original work that provides new insights into the relationship between teacher thinking and action.

<b>Poster 1:</b>	19/11/2009	10.45 – 12.15
<b>Presenter:</b>	<b>Carol Anne Bundy</b>	
<b>Co-presenter:</b>	<b>Jonas Salk</b>	
<b>Title:</b>	<b>Purpose as biological necessity - Human consciousness from an evolutionary perspective</b>	
<b>Theme:</b>	Motivation and Emotion	

### **Abstract\_**

Dr. Jonas Salk, inventor of the world's first successful polio vaccine, referred to the twentieth first century as the beginning of the "Millennium of the Mind." A deep thinker whose intellectual interests went far beyond medicine and science, he began a five year collaboration with colleague Carol Anne Bundy for the purpose of writing a book about the human futures from an evolutionary perspective of human consciousness.

Through their collaboration, Salk and Bundy systemized a collected body of thought from the lifelong philosophical written record of over 100,000 type-written pages composed by Salk and edited by Bundy.

The work was expanded upon significantly throughout their exchange, resulting in the formulation of a philosophical framework including a collection of seminal charts about the nature of thinking and human consciousness as applied to human development on the individual, communal and species levels - specifically the entitled Matrix of Human Consciousness, the Periodic Table of Human Development and diagram showing a proposed shift in human values as seen along a Sigmoid curve, all three which will be presented and explained.

Reporting on this original research central to the Salk/Bundy collaboration, this poster focuses on presenting these findings for practical value in terms of human development, specifically motivation vis à vis exercise of authentic life purpose towards self-actualization and conscious design through judgment and choice towards more hopeful future.

The research question asks can "wisdom" be taught if we can see ourselves in evolutionary time, which can be thought of alternatively, in Salk's wording, as "the ability to make retrospective judgments prospectively."

The procedure of analysis will look at case studies of public opinion (via opinion poll) surrounding three major twentieth and twenty-first century public issues with an interactive element included for audience participation following presentation of the research findings and brief outlining of the public issue scenarios.

### Literature (abbreviated)

- J. Salk & C. Bundy, The Collected Salk/Bundy Papers- 1990-1995.
- J. Salk, World Population and Human Values (1981.)
- J. Salk, Survival of the Wisest (1973.)
- J. Salk, Anatomy of Reality (1985.)
- C. Bundy, AMICUS: An Epidemic of Goodwill (pub. date Oct. 2009.)
- C. Bundy, Future Ancestorhood: The Search for a Global Ethic and Why it Matters (2008, manuscript)
- P. Singer, How are we to Love? Ethics in an Age of Self-Interest (1997.)
- Salk, J. --- Are we being good ancestors? World Affairs 1(2): 16-18, 1992. [Based on Acceptance Address: Jawaharlal Nehru Award for International Understanding, 1977.]
- C. Bundy, AMICUS, Grassroots for Scientific Advancement and Policy Change (Oxford, UKFIET paper delivered 2009.)
- C. Bundy, Altruism and Developmental Education - Call for a Third Culture Mandate (Oxford, UKFIET paper delivered 2007.)
- L. Crutchfield & H. Grant, Forces for Good: The Six Practices of High-Impact Non-Profits (2008)
- J. Ogilvy, Creating Better Futures, (2002.)
- J. Schwartz, Inevitable Surprises, (2003.)

### **Significance for educational practice and/or policy?**

Human beings now live at a time of unprecedented change in terms of the amount of information available and the rate at which new information is generated. Secondly, perhaps never before have there been so many global human challenges and opportunities with success or failure dependent, in part, on our ability to make sound judgment in both the short and long term. The process of making sound judgments can be improved with better understanding of our motivations/goals and the role of feeling/thinking in planning for the future. Students could benefit if given new "life-tools" which, by allowing for an evolutionary perspective - or "map in time in terms of human consciousness" from individual, communal and species levels, would foster insight into factors conducive to wise choices.

### **3 propositions to be discussed?**

If it can be said we are experiencing a stage in the evolution of human consciousness which is precipitating a global shift in human values, especially within the developed world - perhaps best exemplified by such trends as the growing corporate social responsibility movement, etc. - then the successful outcome of such shifts may benefit through a perspective of evolutionary awareness.

Proposition One- Human understanding involving moral issues can often be best developed experientially as opposed to dialectic teaching methods.

Proposition Two- It can now be argued that what happens anywhere can be thought of to happen everywhere through our increasing global inter-connectivity.

Proposition Three - If it is in our mutual self-interest to become more altruistic, this is most easily understood and integrated through the experience of becoming more altruistic.

<b>Poster 2:</b>	19/11/2009	10.45 – 12.15
<b>Presenter:</b>	<b>Ditte Lockhorst</b>	
<b>Co-presenter:</b>	<b>Wilfried Admiraal</b>	
<b>Title:</b>	<b>Teacher communities for work and learning: how to measure social competences and community building?</b>	
<b>Theme:</b>	Learning in school, the workplace and communities	

### **Abstract**

Teacher professional development particularly focuses on the growth in competencies in the area of pedagogy, classroom management, design of educational materials, and assessment and evaluation. If social competencies of teachers are addressed in research on professional development, social interaction (communication as well as collaboration) is seen as a condition for learning effects in terms of acquiring more knowledge and skills in pedagogy and the subject matter. The assumption is that the more frequent, regular, and shared the social interaction is, the more will be learned in terms of pedagogical skills and content knowledge. However, we argue that social competencies themselves are also important in the profile of a competent and experienced teacher in secondary education. Teachers, who are able and willing to interact, communicate and collaborate with peers and colleagues not only learn themselves, but also stimulate a learning culture in a school.

Not only at an individual level teachers' social competences influence a professional culture in schools; teacher communities can also be seen as a potential vehicle for sustainable teacher collaboration within schools. Several studies discuss the potential of professional teacher communities as stimulating context for the improvement of teaching practice and the development of shared knowledge, for school improvement and innovation, and for teacher learning (Grossman, Wineburg, and Woolworth, 2001; Little, 2003; Achinstein, 2002; Scribner, Sawyer, Watson and Myers, 2007; Imants, Slegers and Witziers, 1999).

So, both teachers' social competences and teacher communities are important goals to strive for. There is a considerable body of literature on the potential of teacher communities and teacher collaboration for school improvement. However, to a far lesser extent we find empirical studies on teacher communities' characteristics and development within schools, and on the concept of social competences of teachers. To study the development and characteristics of teacher professional communities, teachers' social competences and the relation between both concepts, reliable and valid measurements of both concepts are needed.

A framework for the measurement of community building of teachers in secondary schools has been developed. This framework includes three dimensions commonly known as core features of the community concept: shared domain, group identity and interactional repertoire. Data can be collected in two ways: the observation of teacher behaviour with indicators for each dimension and teachers' sense of community as measured in a questionnaire. Social competences refer to the integration of knowledge, skills and attitude within a certain context (e.g., a particular community). These are measured by a combination of the observation of individual behaviour of community members and stimulated recall interviews.

This framework has been used in three PhD-projects which study the social competences and community building of teachers and student teachers in secondary education. In these projects, several problems occurred when the framework has been applied. First, the interpretation of teacher behaviour appeared to be difficult. Interpretations of teacher behaviour lead to ambiguous results: a particular activity might be understood as typical for a particular mature community as well as for the absence of any community. Secondly, the relation between the measurement of community and individual behaviour has been unclear. For example, is community behaviour to be defined as the sum of individual behaviour (social competence)? And thirdly, being aware of complexity of communities, each showing characteristic behaviour, should communities be defined by members' behaviour or by members' sense of community?

### **Significance for educational practice and/or policy?**

Research on professional development and learning within social interaction is still quite rare (Billett, 1996, 2004). Obviously, it is difficult to translate these conceptual ideas into accurate research designs

and analytical frameworks. This also seems to be true for research on social learning effects on both individual and collective level. In our research on teacher professional development, we want to take this challenge to enhance the knowledge on how to study social learning effects from a social-interactive perspective.

### **3 propositions to be discussed?**

1. In our model we distinguish dimensions and indicators to describe teacher behaviour in communities. How do individual measurements of community provide a reliable and valid picture of the particular community as a whole?
2. We measure communities from two perspectives: experience by members (sense of community) and behaviour. Can teacher communities be measured by the observation of teacher behaviour and/or by the sense of community teachers have?
3. The relation between teacher communities and social competences can be described as reciprocal: teachers need social competence to be able to function in a teacher community and by being in a community teachers develop social competences. When measuring teacher communities on an individual level by behaviour, how does this measurement relate to indications of teachers' social competences?

<b>Poster 3:</b>	19/11/2009	10.45 – 12.15
<b>Presenter:</b>	<b>France Dubé</b>	
<b>Co-presenter:</b>	<b>Lyne Bessette, Catherine Dorval</b>	
<b>Title:</b>	<b>Experimentation on a differentiated and explicit writing approach</b>	
<b>Theme:</b>	Learner Diversity and differentiation in the learning environment	

### **Abstract**

The integration of students with learning difficulties in regular classes improves their success in school (Bear & Proctor, 1990). However, it entails a great challenge to the teachers of regular classes (Meese, 2001). The difficulties these students face in the different disciplinary skills, such as reading, writing and mathematics, calls for a reaction and an innovation of the school milieu (Dubé, 2007). It is thus vital to establish a link between the research and the practice so that the education community can benefit from the results of research projects (Buysse, Sparkman & Wesley, 2003). The flexible grouping seems to favour the skill development of students with learning difficulties when it is associated to a structured teaching program (Gullatt & Lofton, 1998; Baumgartner et al., 2003; Khun, 2004; Castle et al. 2005). Empirical studies results show that explicit teaching could be particularly successful for students with learning difficulties (Rosenshine, 1986; Beckman, 2002; Swanson & Deschler, 2003; Gauthier et al., 2004). Saint-Alexandre students have benefited from a flexible grouping system associated to a structured teaching program. The structures were differentiated by regrouping the students in subgroups which respected their needs and met on a half-day per week basis. These subgroups were not permanent; they could be reorganized as needed depending on each student's skills progress. At the beginning of the school year, the students' needs were concerted through a reflexive approach (Schön, 1994), and their evolution was followed throughout the whole year. These methods of concertation have empirically proved to be efficient (Hunt, Soto, Maier & Doering, 2003).

The main objective was to encourage the development of disciplinary skills in writing of the students with learning difficulties that were integrated in regular classes. The components we prioritized for the students with learning difficulties were 1) to use the strategies, the knowledge and the techniques required by the situation of writing, 2) to explore the various resources of the written language, and 3) to evaluate the writing approach so as to improve it. A mixed method was used to collect both qualitative and quantitative data.

The teachers and the researcher attended a one day course in explicit teaching in September. The teachers and the specialist wrote a weekly journal (Van der Maren, 1987) to let traces of the component skill "write different kinds of texts"; these texts were written in the special needs subgroups. The journal also registered the modifications made to the subgroups. In order to evaluate the progress of the students' skills development, three complex writing tasks were conducted for all the students of the school, from the first to the sixth grade (n=250); the first one was held at the beginning of the school year (September), the second in the middle (January) and the last one at the end (May).

The results showed that the students with severe learning difficulties developed their writing skills while performing complex but differentiated tasks in their own subgroups. As they had fewer students, they allowed them to participate more actively and to have a more direct interaction with the educator. The integration of students with difficulties was favoured because all the school students participated in the activities proposed and they all did it simultaneously in order to participate to an education community where the school participants differentiated the tasks respecting each student's level of competence.

### **Significance for educational practice and/or policy?**

In this study, the cycle community backed up the activities trying always to present tasks the students would be able to perform. The education community created thanks to the aid of the school and the research milieu enriched the school teachers teaching interventions as well as those of the other participants by taking support on data of scientific research in education. This research project allowed the construction of durable teaching practices for the school; it will also make so that the students can employ the strategies they have learned in all their writings throughout their school courses.

### **3 propositions to be discussed?**

Collaborative research

Innovative teaching and learning methods



School adaptation and integration

<b>Poster 4:</b>	19/11/2009	10.45 – 12.15
<b>Presenter:</b>	<b>Hans de Vries</b>	
<b>Co-presenter:</b>	<b>Cees Terlouw</b>	
<b>Title:</b>	<b>Increasing a better study career choice by using a computer assisted self-assessment</b>	
<b>Theme:</b>	Learner Diversity and differentiation in the learning environment	

## Abstract

### Problem and context

The decrease of first year student drop out is the most important policy topic in Dutch higher education for the period 2008 – 2012. A wrong study choice is considered as one of the main causes in this respect. Therefore, different projects are set up in 11 institutes of Dutch higher education in order to find out what is the best way to match the study career choices of students for their study in Higher Education.

The Saxion University of applied science is one of the 11 Dutch educational institutes taking part in this project. The Saxion pilot-project starts with a digital assessment system that matches the self-perceived student's personal qualities with the social and professional competences profile of a chosen study. Based on this system, the potential new students gets a report in which he can see in a graphical spider web in what measure his self-perceived personal qualities match with the desirable competences that the chosen study likes to see as available basic skills. Before starting the study the results of the matching system are discussed in a conversation with the potential new student in order either to clarify the intentions and perceptions of the potential student or to guide the student to a more appropriate course.

### Theoretical framework

The process of study career choice is the central focus. Based on the theory of planned behaviour (Ajzen, 1991) Kemper et al (2008) distinguish in their model four kinds of factors influencing study choice: (1) personal factors (e.g. gender), (2) attitude towards a study and related jobs, (3) the measure by which others have influence on study choice (e.g. parents, peers, school career coach) and (4) self-efficacy. The combination of these four factors leads to a formation of a behavioural intention to make certain study choices, and really to take action(s) such as to persist in the study choice, study switch or drop out.

### Research Question

Does a matching-instrument consisting of a digital assessment tool and a conversation about the results with the potential student influence the process of study career choice in the first six months of the study?

### Instruments and procedure

The participating students in the Saxion pilot project will be monitored from the start in June 2009 until the end in February 2010 in which the pilots in the four bachelor studies are considered as case studies. The monitoring concerns the development of the study career choice during the first year, taking into account the four factors mentioned, the intentions and the action(s) taken. The first monitoring activity starts by filling in the computer assisted self-assessment tool by the students (zero measurement). Next, after the matching conversation the students and tutors fill-in a questionnaire with pre-coded questions about the factors of the study career choices, the intentions and the actions taken. This questionnaire is repeated in October '09 and January '10 following the student individual study career. In January '10 students also will be interviewed.

### Literature

Ajzen, I. (1991). The Theory of planned Behaviour, *Organizational behaviour and human decision processes*, 50, 179-211.

Kemper, Peter and Hoof van, Joris and Visser, Martijn and Jong de, Menno (2007) *Studiekeuze in kaart gebracht : gedragsdeterminanten van scholieren bij het kiezen van een vervolgopleiding*. Tijdschrift voor Hoger Onderwijs, 25 (4). pp. 270-279. ISSN 0168-1095

### Significance for educational practice and/or policy?

Institutes of higher education in The Netherlands are not allowed to select for entrance in the first year. Students have the right to enroll in some study domain if they pass the exam in secondary education in a certain subject combination. At this moment the student drop out in the first year has an average of about 30%. By using this instrument of matching the self-perceived student's competences with the desirable starting course competences before starting the course, we hope to guide the potential students to a better study career development and decrease the first year drop out.

### **3 propositions to be discussed?**

#### **I. Matching or Selection**

There is actually no difference between the use of a self-assessment tool for matching personal students' qualities with the desirable starting course competences, followed by a conversation, and an entrance selection at the start of a course in Higher Education

#### **II. The determining factors and study choice behaviour**

The determining factors for study choice behaviour for Higher Education are covered by the four factors mentioned (see theoretical framework).

#### **III. When is an ICT tool effective; in a pedagogical view or by an organisational way?**

The effectiveness of ICT means/tools in educational environments can be determined by either the pedagogical view on the quality of learning, or measured by financial profit through an increase of efficiency.

<b>Poster 5:</b>	19/11/2009	10.45 – 12.15
<b>Presenter:</b>	<b>Jaap Walhout</b>	
<b>Co-presenter:</b>	<b>Saskia Brand-Gruwel, Rob Martens</b>	
<b>Title:</b>	<b>Adaptive instruction to foster students' information problem solving skills: learning to organize digital information</b>	
<b>Theme:</b>	ICT and benefits for learning	

### **Abstract**

In today's information society people have to manage an overload of information adequately. Being able to search, find, evaluate, select, process, organize and present information in order to acquire new knowledge is an important skill. This skill is defined as information-problem solving (IPS). It is widely accepted that instruction in IPS skills is necessary (Brand-Gruwel & Gerjets, 2008).

Two developments make it important that instruction in IPS is needed. First, the information environment changed considerably. With the emergence of the internet, access to information became very easy and people have access to enormous amounts of information. But this information is not filtered, evaluated or organized. Secondly, in today's education students often get assignments which require searching for information. However, research shows that many students are not able to solve information-based problems successfully, and that they have especially problems with the ability to organize found information.

Organizing information in a proper way is not easy. Before the internet, information was in books which were stored in libraries. A book cannot be on two shelves. The main subject of a book was therefore used to classify the book into a certain category. Adopting the library way of organizing information, web directories were created to bring order in the available content. Because people are so used to such a hierarchical system, it seemed natural to categorize information in classes and subclasses (Shirky, 2005). Although hierarchical classification systems are a good way of bringing order in a collection of physical objects, with the use of virtual information objects it becomes possible to organize the information with labels or 'tags'. Consequently, information can be attributed to different classes. With the emergence of social bookmarking, which lets people define their own tags (folksonomy), users are given more control over organizing the contents of the web using own rules and categories. Hence, information is not structured in advance but afterwards (Wichowski, 2009).

Another problem encountered when organizing information (using a hierarchical or tagging approach) is defining the categories or label to organize the information. Especially for domain novices this is difficult due to lack of prior knowledge (Rogers & Swan, 2008). The use of ontological schemes to stimulate students to organize information in a proper way seems helpful (Stadtler and Bromme, 2008).

Instruction in organizing web-based information should foster the use of a non-hierarchical tagging approach and make use of ontological schemes. Moreover this instruction should be embedded in the schools curricula and should be adaptive. For instance the amount of guidance in learning to organize will be adapted to the learners needs. Students with more prior knowledge should be able to use own categories and adapt the existing or given ontological schemes. It is expected that instruction in organizing information with the tagging technique will improve students' organization of information, the ability to select relevant and reliable information and will have a positive result on overall task performance. Moreover, adaptive instruction concerning the used ontological schemes will lead to better results for especially intermediates and novices.

This poster will present a theoretical framework to address the problems encountered when people organize web-based information and the mechanisms that should be taken into account when organizing web-based information. Furthermore, instructional solutions will be addressed, with a special attention of the design of adaptive embedded instruction.

### **Significance for educational practice and/or policy?**

The use of a tagging approach for organizing information is quite recent. Users are now able to assign tags (metadata) themselves to information object. The implications of this development for education are not very well documented at this moment. Moreover, the changes in learning paradigm and the change in the information environment require instruction in this skill. In order to design effective

adaptive instruction, research is needed into the different aspects of this complex skill. This research project will focus on the skill of organizing information during the search and collection of information. The results will help teachers improve their instruction in this skill. Moreover teachers will be provided with guidelines for developing instruction which can be adapted to the level of prior knowledge of the students.

### **3 propositions to be discussed?**

Taken the theoretical framework as starting point, discussions can be about the proposed instructional solutions. Propositions for the round table discussion:

1. Does the use of a tagging tool lead to better performance than a hierarchical tool? Hypotheses: Students using a tagging tool do organize information more structured, select websites and information of a better quality compared to using a hierarchical tool.
2. How should instruction be designed in order to make it adaptive? Hypothesis: Adaptive instruction will have a positive effect on students' organization and selection process, and task performance in the domain of instruction.
3. How should the ontological schemes be used in the instruction? Hypothesis: Novices will profit more from a given ontology compared to the intermediates in a domain.

<b>Poster 6:</b>	19/11/2009	10.45 – 12.15
<b>Presenter:</b>	<b>Janina Pfeiffer</b>	
<b>Co-presenter:</b>	<b>Susanne Druener</b>	
<b>Title:</b>	<b>Assessment of medical students competences in Physician-Patient Communication</b>	
<b>Theme:</b>	Assessment and Evaluation methods/tools	

### Abstract

Communication has a high relevance for physicians' daily practice: A general practitioner spends about 60-80%, a physician in hospital about 40-50% of his daily working time communicating with patients (Stein, 2000, zit. n. Geisler, 2004). Education in German universities used to focus on study of diseases and how to measure them, while communicative behaviours hadn't been a set standard in medical education (vgl. Geisler, 2004). Just since the new "Approbationsordnung" (2002), which accentuates the high relevance of topics like communication and physician-patient relationship (Nikendei, Zipfel, Roth, Löwe, Herzog & Jünger, 2003), universities are about to change their educational system and establish practical courses, some of them focusing on the communicative competence of medical students, for example by working with Standardized Patients (SP). The benefit of working with SPs is that students learn, by really acting in a situation, a wide range of diseases can be realized by the SP (especially sensible topics appearing in palliative medicine) and the students are allowed to make mistakes, without taking the risk worsen a real patients situation (Barrows, 1993). To assess how adequate a student acts in such a situation, a valid tool and criteria defining the goals are needed.

To develop a valid tool, the relevant competences required from a physician in a physician-patient communicating situation were assessed in a requirements analysis. Both perspectives were included: physicians view (Workshop with four doctors and two persons with lots of experience with training Standardized Patients) and the patients view (online questionnaire, 27 persons participated). The results were formulated into 77 items, and can be clustered into four main competence areas, which are relatively common in competence research (Bernien, 1997, zit. n. Richter, 2005, p. 20):

1. Methodological Competency
2. Professional Competency
3. Social Competency and
4. Personal Competency

After two pretests (N=35 and N=18) the questionnaire was shortened to a length of 31 items, with a five-point Likert Rating Scale. To analyze, the factorial structure, e.g. if the four factors can be empirically found in communication situations of medical students, the questionnaire was filled out by 189 medical students, after watching a conversation where one medical student, in the role of a physician, has been communicating with an SP. Regarding the first research question, concerning the factorial structure, an explorative factor analysis and a confirmatory factor analysis were realized. Both endorse the assumption of a four factor model.

In earlier studies, criteria to assess the adequacy of the physician's behaviour communicating with a patient have been defined. Maybe mostly assessed: Patients satisfaction, positive correlated to adequate behaviour of the physician (Ong, de Haes, Hoos & Lammes, 1995). Thinking that the communication should have positive effects on different levels, five criteria were defined in our study and measured, while each of the four assumed competences of the physician was hypothesized to be related to one criteria significantly:

- a. (Standardized) Patient's satisfaction ◇ Social Competency
- b. (Standardized) Patient's feeling of being informed ◇ Social Competency
- c. Physician's Satisfaction ◇ Professional Competency
- d. Physicians Self-efficacy ◇ Personal Competency
- e. Efficiency of the conversation ◇ Methodological Competency

To analyze these assumptions, Spearman-correlations and semi partial correlations were realized over 60 conversations, all with significant positive results.

A new tool has been validated and can be used to assess medical student competences, clustered into four factors, and relevant for the physician himself and the (Standardized) Patient.

**Significance for educational practice and/or policy?**

To improve competences an instrument is needed, to allow you to make reliable conclusions about the augmentation of competences after an intervention. Additionally educational practice and policy needs criteria which allow deciding if an intervention or training has been effective, e.g. how significant an augmentation of competences has been. The described results support the usefulness and validity of the developed questionnaire, because the assessed competences are found to be relevant for physician-patient communication and strong links to five outer criteria were found, focusing on different aspects, e.g. patient view, physicians view and observers view. Hence, the developed questionnaire is a useful tool, which can already be used in medical education. The measured criteria can be used in other studies as well to assess the adequacy of physician's behaviours.

**3 propositions to be discussed?**

1. Defining criteria is essential to improve competences in educational practice.
2. The four-factor competence model can be used to improve different competences, by realizing situations, where the SP demands for one competence especially.
3. Standardized Patients are an adequate tool to improve medical students competences required in physician-patient communication.

<b>Poster 7:</b>	19/11/2009	10.45 – 12.15
<b>Presenter:</b>	<b>Marian Kienhuis</b>	
<b>Co-presenter:</b>	<b>Cees Terlouw</b>	
<b>Title:</b>	<b>An integrative framework of study career counselling for students of senior general secondary education</b>	
<b>Theme:</b>	Innovative teaching and/or learning methods/techniques	

### Abstract

Context, problem and research question

Many students in senior general secondary education in The Netherlands experience a lot of problems in choosing a study in higher professional education that fits them best. Moreover, a lot of these students also don't have a realistic image of the professional perspectives of the study of their choice. As a consequence, a lot of students drop out or make a switch in their first year or later. A main reason for the problem is the lack of coherence in the system of student counselling through the years in secondary education and in the transition to the first year of higher education. Therefore, our general research question is: Which design for an integrative framework of study career counselling can improve the coherence of the existing practice of study career counselling in the joint transition period from senior general secondary schools to higher professional education?

### Theoretical framework

Three clusters of variables were used for the design of the integrative framework: process, content and conditions. Kuipers et al (2006) give evidence that the process of the formation of a work identity is crucial. This concerns the development of career competencies such as career reflection, career development and networking in a dialogue between student and study career counsellor. The content of such a dialogue can be derived from variables in the Theory of Planned Behaviour, as applied to study choice behaviour (Kemper et al, 2007). This concerns attitude toward and image of studies and professions, subjective norm for study choice and observed behaviour control in terms of self-efficacy. Van Asselt (2007) specifies several educational conditions of the educational system in order to take care for a good "fit" in the transition between educational institutes in a segmented educational system.

The specific research sub questions for the case study are:

1. Which components should an integrative framework contain, taking into account theoretical and practical evidence?
2. Are they used in a school, and if so, how do they appear; and if not, why not?
3. What are the experiences of the different participants with these components?
4. Which components should an integrative framework contain from the perspective of secondary education, taking into account the results of the subquestions 2/3 ?

### Research design

A prototype for an integrative framework was designed based on theoretical and practical evidence. Next, a single in-depth case study was executed in one school for senior general secondary education applying a questionnaire for document analysis and for interviews of the school principal, team leaders, deans and representative groups of teachers, mentors, students and parents. Finally an improved integrative framework from the perspective of secondary education is designed. This design will be the input for the higher education need assessment.

### Results

The case study shows that the integrative framework can be used to analyse the policy and practice of study career counselling. It shows gaps between policy and the real practice at micro- and mesolevel.

### Literature

- Asselt, R. v. (2007) Doorstroom in onderwijs en de betekenis van een goede aansluiting, Enschede: Saxion
- Kemper P., J. van Hoof, M. Visser, M. de Jong, 2007, Studiekeuze in kaart gebracht, gedragsdeterminanten van scholieren bij het kiezen van een vervolgopleiding 25(4) 2007, Tijdschrift voor Hoger onderwijs.
- Kuipers M., F. Meijers, J. Bakker, 2006, Krachtige loopbaangerichte leeromgeving in het (v)mbo, Hoe werkt het? gedownload [www.hpbo.nl](http://www.hpbo.nl)



**Significance for educational practice and/or policy?**

My submission shows the importance of bringing existing scientific knowledge about successful interventions in study career development in the educational transition practice. Student career development should be considered as a process in which school principals, team leaders, deans, mentors, teachers and parents play a specific role. In this process it appears to be very important that students have experience with real life situations in order to achieve work identity. This will help them in choosing a more realistic study that fits them. Especially teachers, who are in daily contact with the students, can play a more significant role in dialoguing with the students about their experiences. Therefore school policy should see to it that in every form students have an opportunity to experience in powerful learning environment

**3 propositions to be discussed?**

1. Student career development should be the central topic in a student-oriented school transition policy for higher education.
2. Student career development is neglected in initial teacher education.
3. Both students and study career counselors should be trained in respectively the study career competences and counseling competences.

<b>Poster 8:</b>	19/11/2009	10.45 – 12.15
<b>Presenter:</b>	<b>Nine van Schuppen</b>	
<b>Co-presenter:</b>	<b>Cees Terlouw</b>	
<b>Title:</b>	<b>Ethnic minority students on the road for a successful transition to higher professional education</b>	
<b>Theme:</b>	Learner Diversity and differentiation in the learning environment	

## Abstract

Problem and research question:

The road to access and success in higher education is not easy for every aspiring student. Dutch students from an ethnic minority-background still have –despite progress- more trouble to enter higher education, as well as staying there: we observe a higher drop-out rate. These students take more time to attain their bachelor degree. (Wolf, 2007)

This is an issue for improvement in the educational policy of the Dutch government and object of concern in all educational institutions.

One tool to reach that is study career counselling as an ongoing process. It concerns a transition in vocational education: the transfer from senior to higher professional education.

The general question is :

In what way can study and career counseling contribute to an improvement of the study success in higher education for first-generation students, from an ethnic family background?

Theoretical framework:

A lot of determinants account for the differences in school careers and success between students from different cultural backgrounds.

In this research we focus on mentoring as an element of the pedagogical context of the secondary school. We use a model of study career counselling, as laid out by Kuijpers. (2006) In the process of study career counselling the student is forming his vocational identity and learning to make conscious choices in career development. Dialogue and trust in the coach-student relation are central concepts in this form of supervision. (Kuijpers,2008).

In this respect we connect with some aspects of cultural diversity, as developed and tested by Geert Hofstede ( 2005 ) These aspects (e.g. power/gender etc) do influence intercultural communication, between mentor and student.

We focused first on the following sub question:

Which experiences have students from different cultural backgrounds in their first year of higher education with their transfer from senior vocational secondary school?

Procedure:

We conducted a case-study spring 2009 among first-year students in higher professional education from different departments and with different backgrounds..

A semi-structured, in-depth interview format was applied, in which the topics were derived from the theoretical framework mentioned above. The students interviewed were not exemplary: they were the good students, who had already survived selection midway their first year

We are planning a follow-up on this case-study this fall with special focus on the drop-outs:

What makes them drop-outs? Where in the transition did they lose the connection?

The same interview format will be used for a new first-year student group. This research is practice-based, and interpretative by type of analysis.

Results

In April/May 2009 12 students -in their first year of higher education- were interviewed in a case-study about their experience with supervising, their orientations and expectations, while still in their senior secondary school, looking backward. We also asked them about their experiences and results here and now, in higher education

These results will be complemented by our research this fall and integral presented in our poster presentation.

#### Literature:

- Kuijpers, M.A.C.T. & Meijers, F. (2008) Studieloopbaanbegeleiding in het beroepsonderwijs. Volgen, achtervolgen of praten? MESOmagazine 28e jrg., nr 159 april 2008 pp 17-21
- Kuijpers, M.A.c. T., Meijers, F & Bakker, j. (2206) Krachtige loopbaangerichte leeromgevingen in het (v)mbo: hoe werkt het? Driebergen: HPBO
- Hofstede, G. (2005) Allemaal andersdenkenden: omgaan met cultuurverschillen. Amsterdam: Contact 20ste ed.
- Wolff, R. (2007) Met vallen en opstaan. Een analyse van instroom, uitval en rendementen van niet-westerse allochtonen in het Nederlands hoger onderwijs, 1997-2005. ECHO

#### **Significance for educational practice and/or policy?**

Dropout rates in higher education are considered as a big issue by political actors and in educational practice. This is viewed as a waste of energy, talents and money for all involved. The Dutch government policy is to enhance the rates of higher educated professionals in view of the knowledge-oriented society.

The Netherlands, like other rich West-European countries with a history of colonization and immigration, are struggling in many respects with the balancing of interests of many minorities and migrants. Integration is considered as dependent on work, and work with status is dependent on education. Education is the most important way to ensure and canalize ambitions and talents of people who have fewer chances than others. Moreover, they can function as role models for a next generation.

#### **3 propositions to discuss?**

We would like to present the results in a poster, and discuss these with participants and visitors. We will also prepare a handout/summary of results

We propose 3 propositions:

1. In study career counseling in relation to students with an ethnic minority background we should be more aware of our own cultural bias.
2. Study career counselling should not be presented as the big hit/hot issue. Best to be low-key, practice-oriented and use our commonsense.
3. Success in supervising is first of all dependent on the skills of the mentor/coach/supervisor  
It would be important to clarify some of those competences, and the more in view of the competence-oriented course-programmes in higher professional education.

<b>Poster 9:</b>	19/11/2009	10.45 – 12.15
<b>Presenter:</b>	<b>Susanne Druener</b>	
<b>Co-presenter:</b>	<b>Janina Pfeiffer</b>	
<b>Title:</b>	<b>Standardized patients as a tool for improving communication skills and social competencies of medical students</b>	
<b>Theme:</b>	Innovative teaching and/or learning methods/techniques	

### **Abstract**

#### Framework/literature

Communication skills are of significant importance within daily medical life providing effective treatment.

Within the last years, they have received more attention, especially regarding the doctor-patient-relationship. This focus can be linked to the discussion about the German public health service and a modified role of doctors. It also fits into the demands of the Bologna Process regarding the improvement of quality in higher education.

There has been an increase of studies in the field of communication skills and social competencies as well as practical experiments in higher educational training.

Several reviews have shown that the most popular and approved concept is the use of simulated or standardized patients (SP). Specially trained actors/actresses communicate with medical students in a role playing environment. Feedback from the standardized patients, as well as from peers and tutors represent a central didactic element.

Since other countries, especially English speaking countries, have started to use SPs a long time ago, they now are becoming an important element in medical curricula of several German universities, among them Heidelberg (Medi-KIT), Bochum, Hamburg, Witten, and also Aachen (AIXTRA= Interdisciplinary Centrum for medical training).

#### Research question/problem

The issue all these projects are dealing with is: How can students train communication and social competencies effectively and how can they be evaluated? For the so called soft skills, it is harder to find concrete indications and criteria to evaluate and measure the outcomes, and to compare the results of training units.

#### Procedure and instruments

SPs are a chance to standardize a conversational situation and give students a secluded environment to train their communication skills. The AIXTRA Skillslab in Aachen practices the following concept:

Background: Since 2005, actors/actresses are casted and trained by a qualified acting coach. The different roles are usually written by the professors, considering the demands of their field of study. The purpose of all scenarios is to improve the communicational and interactive behaviour of the students as well as to train and optimize the structure of anamnesis.

Method: The doctor-patient-conversations are organized in small groups of 3 to 6 students and a tutor. The students are able to get to know their own behaviour and the possibilities of a patient's behaviour in a secluded environment. Afterwards, the student who played the role of the doctor, gets a constructive feedback by the simulated patient, his fellow students and the tutor. Sometimes, individual video feedbacks are included.

Results: Within the last years, the amount of SPs has increased to 35 people. Scenarios can take place in a variety of 40 patient roles in fields like general, emergency, environmental, industrial and internal medicine, psychiatry and human genetics.

Evaluations of the concept have shown that the students appreciate the offer of the AIXTRA Skillslab primarily because of

- the possibility to train a doctor-patient-conversation in a secluded environment
- the authenticity of the SPs
- the direct and constructive feedback
- the possibility of video feedback

For further and continual improvement of the programme, we are planning several studies on learning outcomes and feedback training.

### **Significance for educational practice and/or policy?**

The SP-Programme in Aachen used the experiences of other, esp. international, universities and its own expertise to generate a (at this moment) “best-practice”-concept to train medical students in clinical as well as communication skills.

Our evaluations, studies and experiences can help to further improve the quality, efficiency and standardization (and therefore comparability) of SP-Programmes. The aim of all concepts and experiments is to find a best proven guideline for all institutions that want or are instructed to use simulated patients in their curricula. The success of projects in medical education can help to realise an improvement of quality in medical training, as the Bologna Process requires, and also lead to a transfer of concepts to other fields of study, for example in consulting, sales and marketing or legal practice.

### **3 propositions to discuss?**

1) The concept of the SP-Programme can be transferred to other fields of study and vocational training. Role playing is a useful learning tool for any communicational situation. Students get the chance to train their skills in real life situations and the conversational partner is prepared to play a certain role, to act in a standardized way.

2)SPs can be used in exams. Since the actors are standardized and are given certain styles of behaviour, each student can face almost the same communicational situation. Professors are therefore able to compare the students to each other and to rate the student’s competencies by several criteria.

3) Training communication and social skills helps students to meet the requirements a practical doctor is facing in today’s society.

<b>Symposium 1:</b>	18/11/2009	15.35 – 17.05	Room Franken
<b>Symposium Chair:</b>	<b>Cees Terlouw</b>		
<b>Title:</b>	<b>Promoting cooperative workplace learning in heterogeneous groups. The THRILL experience.</b>		
<b>Theme:</b>	Innovative teaching and/or learning methods/techniques		

**Link between the presentations:**

The symposium title is directly connected with the theme ‘Learning in school, the workplace and communities’: the focus is on cooperative workplace learning as an integral part of the vocational school curriculum of different schools in a network. The conditions for the integration in the curriculum are an important topic of interest. Improving social competences for students and teachers – e.g. ability to cooperate - and improving network learning are topics of report and discussion

**Significance for educational practice and/or policy?**

1. Practical activities and products are systematically designed in the framework of an explicit educational model for promoting cooperative workplace learning in heterogeneous groups,
2. The practice oriented design and testing of the activities and products – a cooperation of teachers and researchers - took place in a real field setting focused on a joint project assignment of vocational schools at three competence levels in a real business environment,
3. The professionalization of the teachers involved took place ‘on the job’ in their own educational practice, and was narrowly connected with the design- and evaluation-activities, and
4. The attention for sustainability by revealing the existing and in the future expected use-level, the stimulating and restrictive innovation conditions, and the opportunities and obstacles provide guidance for school management and policy.

#### **Presentation 1:**

‘Educational model and goal attainment for students and teachers in the THRILL project.’

#### **Presenter:**

Yvonne Leeman

#### **Co-presenters:**

Alexander Jansen, Wim Wardekker

#### **Abstract**

The general goal of the THRILL project is the development of a usable, educational model for education in an authentic business environment, to be jointly used in vocational education at different levels. The characteristics of the educational model are:

- (a) Natural or realistic learning: learning by elaborating a solution for a ‘real’ assignment in an authentic business environment, and
- (b) Cooperative learning in a heterogeneous project group where ‘heterogeneous’ stands for the involvement of different levels of vocational education and the involvement of different disciplines.

Six institutes of vocational education and a labour organization were involved. The six institutes of vocational education concerned 4 institutes of junior secondary vocational education, 1 institute of senior secondary vocational education, and 1 institute of higher professional education; the labour organization concerned the leisure business, in particular a leisure park. Disciplines involved concerned different branches of engineering and business management. The development of the educational model consists of five tranches in which different kinds of cooperation between the institutes involved, and a further elaboration of the educational model took place.

Practice- and design-oriented research reconstructed the key-learning goal of the project as “the awareness of the own possibilities and capacities of every student, and the development of a positive self-confidence (“agency”) that is connected with the acquisition of the traditional disciplinary professional competencies”. Research methods such as formal and informal interviews of students, teachers and parents, observations during project work, and calls with the development group and project management were applied in the five tranches in order to determine if the participating students reached the key learning goal. The research results were used as feedback for the developers in order to improve the educational model and its application. Generally the research conclusions are:

1. The design of a learning environment for natural or authentic learning. The set-up of a learning

environment must take into account that 'authenticity' differs with school level and discipline. On the one hand a learning environment should be 'authentic', on the other hand it is a learning situation for students in which they are allowed to experiment, to make mistakes, etc.;

2. Cooperative learning in heterogeneous project groups. Special attention is needed for cooperative learning with students at different school levels, because there is a tendency to split the task along the different school levels. Beforehand students restrict their own developmental opportunities in this way. Also cooperative learning with people with another background must be considered as a professional competency and not as mere 'cooperation'.

3. Development of a positive self-confidence or 'agency'. Special measures should be taken to stimulate the capacities to be developed, and not (only) the capacities already developed. The same is true for professional oriented knowledge and capacities. 'Authenticity' of the learning situation is not stimulating enough for 'agency'; a teacher is needed;

4. The role of teachers. A stable group of teachers is necessary in order to develop ownership for the innovation. Moreover, professionalization must be provided for guidance skills, and also taking into account that students from higher professional education executed some teacher tasks; and

5. Sustainability of the project. Every individual school must take its own measures in order to realize an integration of such a project in the school curriculum.

### **Presentation 2:**

'A pedagogical approach for cooperative workplace learning in heterogeneous groups in the THRILL project'

#### **Presenter:**

Frank de Jong

#### **Co-presenter:**

Annemarie Goosen

### **Abstract**

Cooperative workplace learning in heterogeneous groups asks for an integral pedagogical approach of the teachers involved. Consultancy and transformative intervention activities, based on class observations and an ethnographic analysis of the THRILL learning process, were applied to assist and enrich the teachers developing the pedagogy for the THRILL educational model. This involved a sequence of intervention- and call-meetings ('intervention') in which the participating teachers develop knowledge and insights, based on their own competencies, that directly had an impact on their educational practice ('transformation'). The central starting-point concerns the student learning- and working process in elaborating a THRILL design assignment in a heterogeneous group. This student learning and working process is considered as a process in which doing, learning, and growing in competence are connected by developing (knowledge) ideas of students that are related with the THRILL-assignment and performance. The consultancy and the transformative interventions tried to enhance that the teachers experience and further develop an 'idea-centred' pedagogical approach in their educational practice. Moreover, a framework for 'outdoor learning' should be formulated. A students' questionnaire with items such as mood / motivation, learning results experienced, group efficacy perceived ('we can do it!') monitored the sequence of intervention- and call meetings.

The resulting components for a pedagogical approach were as follows:

1. A vision on a framework for 'outdoor learning'. The three key-questions for students as developing professionals are: (i) Who are you, and what do you want to be? (ii) What do you want? (iii) What can you do? Answering these questions must take into account that there are different needs for structure and guidance, that the initial students' (knowledge) ideas should be involved in order to motivate students, that students needs basic knowledge-with-insight, and that students can apply a learning-to-learn approach.

2. Pedagogical principles for realizing the before mentioned vision:

- promoting the students' ownership 'agency' for the 'what' and 'how' of the project in order to motivate students,
- doing project work in order to be aware of the own place in the whole process,
- contributing to competence development as a result of teamwork or own initiative in order to enhance self-confidence, and

- starting with the own idea in the 'idea-centred approach'. A pedagogical action help for students and teachers could be developed in the form of an idea-development cycle with such action stages as individual and group brainstorming, individual and joint searching what is known about the idea, idea improvement and solutions, executing and evaluating for better solutions, and idea improvement.

3. Principles for teachers such as giving assistance to students for idea development, acting as an information source for and explaining knowledge to students in order to create a firm knowledge base, integrating the own learning-to-learn skills in the learning materials, and taking care for a climate for joint learning, designing, and working in which each talent can grow;

4. Principles for students. Students are asked to demonstrate an active learning attitude: taking initiative, learning to cooperate and to share knowledge;

5 Principles of school- and class-management. School culture and organization should facilitate educational arrangements that are student-centred, are clear about the 'why' of information, topics, and the competences to be learnt, apply formative assessment for monitoring progress, and develops and handles joint norms and values for working and learning.

### **Presentation 3:**

'Sustainability of the innovative activities, products, and results of the THRILL project'

#### **Presenter:**

Cees Terlouw

#### **Co-presenter:**

Theo van Geffen

#### **Abstract**

Taking into account the need for a sustainable innovation, the THRILL educational activities developed and the acquired results should find their way back in the six participating institutes of vocational education. Therefore the research goal was to stimulate the thinking about and the intention for a sustainable implementation of THRILL activities and products developed and acquired results in the own school curriculum. The general research question was "in what measure and under which conditions are the THRILL project activities and its results momentarily used and/or will be used in the near-by future in the participating institutes of vocational education?". More specific research questions focus on the use-level (the micro-, meso-, and/or macro-level of a school system), the conditions to be realized, and the opportunities and obstacles perceived. In total 17 persons were interviewed, and completed beforehand a pre-coded questionnaire as preparation for the interview. All schools and project roles were represented in the participants of the research. Single and comparative case analysis was applied analyzing the data. The results are the following:

1. Use and level of use of THRILL activities and –results. Almost all schools used in some way all the activities. In the future the schools intent to use about 75% of the activities, more or less adapted to the own situation. Usually the adaptation concerns the limitation of heterogeneity to two nearest school levels. 66% of the schools used and will use about 50% of the innovative products and results. The use-level is the micro- and meso-level: the content is organized in some course and/or in a part of the curriculum. The alignment with the other schools concerns only organizational and logistic aspects, not the content. None of the schools continue the THRILL project as such. Three schools from each level continue in a comparative way using adaptively several THRILL activities, products and results. Three junior secondary vocational schools 'freeze' the situation as a result of external developments and internal discussions.

2. Stimulating and restrictive innovation conditions. A common stimulating condition is the opportunity to experiment with innovative ideas and to learn from the experiences. A common restrictive condition is the shortage in time, money, and human capacity. Especially for the future the condition "time" is relevant in different aspects: time for the teachers, time for the project as such, and flexible scheduling. 'Ownership' is an important condition. A condition is the more stimulating, the more the project activities, products and results are compatible with the own character and educational philosophy of an institute and the teachers' attitudes concerning 'good education' (and vice versa). Comparatively the same is true for students. 'Student ownership' will not grow if there are such restrictive conditions as no choice possibilities, an unclear guidance, and too abstract and difficult assignments. Finally the absence of an efficient project organization and a professional approach is a restrictive condition.

3. The biggest opportunities were expected in running projects in which an institute cooperates with a



school at the nearest level: junior secondary vocational education with a school at the senior level; senior secondary vocational education with higher professional education. The biggest obstacles were expected in the existing structures in the school – organization, time-table – in shortages in time and money, and in teachers' and students' attitudes concerning innovation.

<b>Symposium 2:</b>	20/11/2009	11.35 - 13.00	Room Römer
<b>Symposium Chair:</b>	<b>Bregje De Vries</b>		
<b>Title:</b>	<b>Out of school, out of sight? Building strong relationships between the world and the classroom</b>		
<b>Theme:</b>	Innovative teaching and/or learning methods/techniques		

**Link between the presentations**

By exploring the possible integration of informal learning experiences with formal learning settings we hope to contribute to a view on learning that is social and networked, a view on learning in which school life and real life (workplace, communities) are intertwined by the social networks learners and teachers live in and use while they are learning.

The aim of the symposium is to explore the role of informal learning in formal learning settings. Each presentation emphasizes one aspect, respectively: Tools for informal learning, the power of real life, and the need for structural embedment. The presentations will be short.

**Significance for educational practice and/or policy?**

Nowadays, young learners move in many different sub worlds outside their school lives, in the real world as well as through the internet. In addition, professional studies increasingly include learning routes that combine school learning with workplace learning. Hence, the role and power of learning in informal places is generally recognized. However, primary and secondary schools hardly look for ways to make strong combinations with possible learning places outside their schools. Research on the ways and outcomes of informal learning could help school practice to update their school programs and make strong combinations with the real world.

#### **Presentation 1:**

'Digital Storytelling: Student teachers exploring their informal learning experiences'

#### **Presenter:**

Bregje de Vries

#### **Abstract**

##### **Introduction**

Student teachers often have strong implicit ideas about what it means to be a teacher, largely built on what they experienced in formal learning settings. Although informal learning is recognized as an important and strong route to personally meaningful knowledge building (e.g., Bekerman, Burbules & Silberman Keller, 2006), it is not included in those ideas. It is argued here that students should be able to include aspects of informal learning into their concepts of being a teacher. The study explored the means of digital storytelling to invite students to integrate their informal learning experiences.

##### **Procedure**

Twentyfive first year student teachers were invited to make a digital story about important informal learning moments in their personal lives. A short written assignment indicated the appropriate digital means to use and the general steps to take. The students worked independently and largely at home, and received support on demand. After several weeks, the digital stories were presented and discussed in the classrooms. The stories and discussions were collected and analyzed to answer the following research questions: (1) How does digital storytelling help the students explicate their informal learning experiences? (2) Which characteristics of informal learning could be included in students' concepts of becoming a teacher in formal learning settings?

##### **Results**

The results presented will show how the students technically made their digital stories, what the digital stories were about, and how the students discussed their stories in the classrooms. Digital storytelling turned out to be a strong medium to invite students to make explicit their personal moments of informal learning, opening their eyes to the value of such experiences. Most students enjoyed telling their story, felt capable of using the computer to do this, and realized communicatively strong stories with emotion, humor, and powerful visuals. By making their own and watching each other's stories, the students

became aware of the impact of life experiences, and the importance of a rich and caring learning environment for personal development. Strong characteristics of informal learning settings appeared to be (1) relationships: with peers, with more experienced or culturally-different others, with animals, and (2) ownership: of what one is doing and which way one is going. Follow-up discussions in the classrooms proved to be necessary to deepen their appreciation of informal learning in formal settings.

#### Implications

The findings suggest that digital storytelling is a fruitful means to articulate implicit ideas, and share them in a group. However, students find it difficult to discuss them in a conceptual way and need support to do this. The findings further confirm that students need help to become more aware of the impact and importance of informal learning experiences, so that they can use aspects of it in their future teaching jobs. Informed by informal learning experiences, formal learning can become more personal and affective. Being able to combine characteristics of formal and informal learning will turn them into teachers who have an eye for children's affective states and personal developments. Such teachers can create strong and safe pedagogical climates for meaningful learning in their classrooms.

Bekerman, Z., Burbules, N.C., & Silberman Keller, D. (2006). *Learning in places: The informal education reader*, New York: Peter Lang.

#### **Presentation 2:**

'Co-designing out of school learning arrangements with low-achieving high school pupils'

#### **Presenter:**

Maarten Hennekes

#### **Abstract**

##### Introduction

In earlier research, twenty-five pupils in their first year of lower secondary professional education made digital stories about their personal lives and presented these in their classrooms. Their growing up in isolation caught eye: they attend little clubs, do not participate in state organized educational youth activities, and merely hang around in their own neighbourhood (Hennekes & De Vries, 2009). In the research that followed we investigated how out of school learning arrangements, organized within the school setting and with the help of school teachers, may contribute to breaking through this isolation and to giving these pupils a warm welcome in the world beyond their own neighbourhood.

##### Procedure

Small design teams consisting of a student teacher, one or two pupils, and a professional from society were formed. Together, they designed a learning arrangement at the workplace. The pupils then took part in this learning arrangements, and presented their experiences in their classrooms. Interviews with the pupils, student teachers and professionals were held, and observations of all meetings, learning arrangements and presentations were collected to answer the following set of explorative research questions: (1) Can pupils, (student) teachers and professionals successfully form design teams for out of school learning arrangements?, (2) How do pupils learn from those arrangements, and (3) Do the arrangements help break through the isolation?

##### Results

The pupils enjoyed the processes of designing and participating in the arrangements. They were able to articulate their needs and wishes, to which the professionals then tailored some workplace activities. Together, they successfully designed short out of school learning arrangements without too much effort in time and costs. The pupils reported cognitive, skill-related and affective benefits from participating in the arrangements such as raised motivation and self-esteem, skills such as role playing, painting and storyboarding, and reading, writing, calculating. Moreover, the arrangements got the children out of their neighbourhood and increased their awareness of possible professional lives after finishing secondary school. The student teachers reported they got to know the children in a different way. The professionals were proud having contributed to the education of these children and showed an amazing amount of responsibility and involvement.

##### Implications

The findings suggest that out of school learning arrangements, and participatory design including pupils and professionals in the design process, can be effective ways to educate a group of most vulnerable youngsters in our society. They contribute to the cognitive and affective development of the pupils, as well as the quality of the teacher-pupil relationship, and the responsibility of society in raising our youth. We therefore argue that further research into the structural embedment of out of school learning arrangements and participatory design in school curricula is needed.

Hennekes, M., & De Vries, B. (2009). *Opgroeien in de wijk* [ Growing up in the neighbourhood ]. Internal report. Nijmegen: HAN Professional University.

### **Presentation 3:**

'Structurally embedding fieldwork in geography: Current practice and new ideas'

#### **Presenter:**

Katie Oost

#### **Abstract**

##### Introduction

Research shows that open, student-centred and research based fieldwork can have a positive influence on the cognitive development of students (e.g., Mackenzie & White, 1982). In school practice, however, fieldwork is often performed as a teacher-led activity (Giménez, Ruiz & Listan, 2008). Although considered important and proved useful, fieldwork in geography education seems not to take off (e.g., Fischer & Norman, 2000; Van der Schee, 2007). The study presents an overview of the current practice of fieldwork in geography secondary education in Dutch educational practice as a starting-point for further research and development.

##### Procedure

An online survey amongst Dutch geography teachers in secondary education was carried out to answer the following research question: Do geography teachers in secondary education structurally embed fieldwork in their teaching, and under what circumstances? About 150 geography teachers in secondary education filled out the questionnaire. The data were analyzed descriptively. Additionally, correlation tests were run to explore significant impeding and supporting circumstances.

##### Results

The data show that, although teachers think that fieldwork includes as much as city trips, outdoor research, closed assignments as well as open research assignments, most of the fieldwork organized takes place in nature, and is highly structured. Although a majority of the teachers organizes fieldwork yearly, only a small group structurally uses fieldwork as an student-centred way of learning in a rich environment. Most teachers feel competent and motivated to organize fieldwork, but experience external circumstances such as time available and school organisation as important obstacles for doing so. We illustrate the findings with narrative accounts of important fieldtrips that the respondents undertook.

##### Implications

To further explore the power of fieldwork as a didactic approach that can be structurally used, it seems necessary to design new ways of embedding fieldwork in the curricula: (1) by making it a collaborative effort of teams of teachers (within and across subjects), (2) by embedding it in the yearly curriculum more frequently and structurally, and (3) by helping teachers to look at fieldwork as a way of learning-by-doing in which students can independently investigate the environment. Follow-up research is outlined in which design experiments with teams of teachers explore those opportunities. In addition, we suggest to include students in the design team to make a stronger case for a student-centred approach in fieldwork.

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